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ADVERTISEMENTS of employers and assistants can be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

THE CHEMISTS' AND DRUGGISTS' DIARY, 1888, is now being prepared. It will be one of the most popular and permanent of the series, and will certainly far exceed the circulation of any preceding issue. Advertisements to appear in this book should be sent in at once.

THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia*. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

At the International Hygienic Congress at Vienna it was resolved to hold the next meeting in London in 1891.

THE IRISH PHARMACEUTICAL COUNCIL are trying to secure the assistance of Lord Milltown in obtaining an amending Act of Parliament.

THE BOARD OF INLAND REVENUE have prosecuted chemists at Tynemouth and at Birmingham for selling essence of pennyroyal in one case, and tincture of rhubarb in the other, prepared with methylated spirit. Fines of 5*l*. were imposed in each instance. The Board have also prosecuted a herbalist at Bolton for infringement of the Medicine Stamp Act. The vendor advertised a blood-purifying mixture for 2*s*., but told his customer (who happened to be an Inland Revenue officer) that if he took a bottle differently labelled and without a stamp he could have it for 1*s*. He was fined 40*s*.

THE North of England Pharmaceutical Association and the Sheffield Pharmaceutical and Chemical Societies have held their annual meetings during the past week, and have listened to addresses from their Presidents. Mr. Martin, at Newcastle, uses the cutting capitalist as a text from which to urge a higher state of education, which, he thinks, is unsatisfactory at the fountain-head. The present arrangements at Bloomsbury Square necessitate, he finds, the study of over seventeen drugs per hour, and he seems to think this is getting within measurable distance of cram. Mr. Furness, at Sheffield, seems to base his hope of the overthrow of the "iniquitous" system of underselling in the medicine trade on some serious mishaps. The Sheffield chemists had secured at their meeting the presence of Mr. Carteighe, the President of the Pharmaceutical Society, whose two or three speeches on the occasion contained a good deal of sensible advice.

Foreign and Colonial.

A BIG SPONGE.—In a window in New York there is at present exhibited a sponge, said to be the largest Florida sponge in the world. The sponge looks like the thatched roof of a small cabin, and measures eight feet in circumference when wet.

PETROLEUM-BORING IN JAVA.—A company with a share capital of 12,500*l*. has been formed at Dordrecht (Holland) for the working of petroleum springs in Java. The shares were not offered to the public, but have all been taken up by a few private capitalists, among whom is Mr. B. W. Blydenstein, of the well-known London banking firm. Mr. A. Stoop, jun., who is now in treaty with the Dutch Indian Government for the concession of petroleum springs in Java, will be the managing director of the concern in the Dutch Indies.

THE ADVANCE IN EAU DE COLOGNE.—According to the *Zeitschrift für Spiritusindustrie* the German eau de Cologne manufacturers have increased the sale price of that article in Germany far in excess of what was warranted by the increased duty under the new spirit law. The extra duty per litre alcohol is 0.70 mark, which, at 150 cubic centimetres per bottle, gives about 0.10 mark per bottle. Yet the retail price of eau de Cologne has been raised at the rate of from 2.40 to 2.80 marks per litre, or about 0.40 mark per bottle.

COCOA-NUT OIL IN THE SEYCHELLES.—The manufacture of cocoa-nut oil is carried on in the Seychelle Islands on a very extensive scale. A large portion of the oil sold in England as "Mauritius" comes from Seychelles. Nearly all the mills in the colony are of the most primitive description—a hollowed tree-trunk, a spar, an ox, and a boy with a stick, and the apparatus is complete. One or two improved mills were introduced some years ago, but they failed for two reasons—they easily got out of order, and "they did their work too well." In these parts the poonac is nearly as valuable as the oil itself; but if all the latter is extracted, the residue becomes almost valueless for feeding cattle, pigs, &c., and it was in this respect that the improved machinery utterly failed. Seychelles is the only place where the double cocoa-nut, specimens of which were shown at the Colonial and Indian Exhibition, is to be met with, and even here there is only one island, that of Peaslin, where it grows in profusion. The nut when cut in two and properly polished makes a first-rate and very ornamental bread-dish or flower-stand.

Metropolitan Reports.

PRICE'S PATENT CANDLE COMPANY (LIMITED) report a profit on the last half-year's working of 22,000%. A dividend of 8s. per share has been declared.

TAKING LAUDANUM.—An inquest was held last week on the body of Mr. Arthur Pawson, a barrister, aged forty. The evidence showed that the deceased suffered a great deal from liver complaint and from neuralgia. To soothe the pain from the latter he was in the habit of taking laudanum. On the night on which he died he had taken, it was believed by the doctor who gave evidence, five teaspoonfuls of laudanum and four teaspoonfuls of Hunter's solution of chloral.

SUICIDE WITH PRUSSIC ACID.—On Monday morning a young man about nineteen years of age, of respectable appearance, committed suicide in Oxford Street. He was walking along at a quick pace, when suddenly he was seen to raise a small bottle to his lips and drink the contents. Immediately afterwards he fell dead. The bottle, which was labelled "Chlorodyne," was found to contain prussic acid. In the pocket of the deceased were found a small photograph of a girl and a lock of hair. The young man is believed to have been suffering from melancholia.

MILK AND WATER.—Two men were charged at Stratford last Saturday with conspiring to expose the Dairy Supply Company (Limited) to penalties under the Sale of Food and Drugs Act, and to cheat certain customers of the company by causing them to pay for milk adulterated with water. The manager of the Stratford branch of the company had been suspicious of the conduct of the men, and on watching them found that of two cans in the cart one contained pure milk, and the other five barn gallons of water coloured with annatto. One of the prisoners had been in the habit of selling as milk a mixture made from the contents of the two cans. Prisoners were remanded.

THEFT FROM WHOLESALE DRUGGISTS.—At the Guildhall Police Court on October 6, Arthur Weaver (17) and George Spurden, chandler, Duke Street, were charged, on remand, the former for stealing and the latter for receiving a quantity of saffron and sixteen bottles of citrate of magnesia from Messrs. W. J. Bush & Co., wholesale druggists, Artillery Lane, E.C. From the evidence it appeared that the warehousemen in Messrs. Bush's had missed articles at various times, and suspicion was fixed on Weaver, a van-boy in their employment. He was watched, and it was found that he took two parcels of saffron to Spurden's shop, where the police also found the bottles of magnesia. The charge was found proven, and Weaver was sentenced to seven days' imprisonment, and Spurden to six weeks—both with hard labour.

CHEMISTS' ASSISTANTS' ASSOCIATION.—The first meeting of the session was held on Thursday evening at the usual place. There was a fair attendance. Mr. T. S. Dymond presided and delivered the inaugural address. Gifted with a musical voice and with a natural eloquence it was quite according to the nature of things that Mr. Dymond should raise the ordinary platitudes of opening addresses to a higher degree of interest. He told the members how successful the Association had been during its ten years' childhood, of the advantages which it offered for personal and especially professional improvement, and before he had done with it he had quite convinced his hearers that the Association is no mean factor in the pharmaceutical world. He impressed the members with the necessity of following science in a humble fashion so that they might sit at the feet of the Gamaliel of No. 17 round the corner; indeed a high professional standard was the key-note of the first part of the address. After glancing at the Jubilee, he went on to speak of the important political events of the past year, noting how the Association had encouraged the Pharmaceutical Council to go on with the defunct Pharmacy Bill, but he protested against the Council's action in regard to the Shop Hours' Regulation Bill, and confidently expected that the Council would forthwith throw up the sponge about that. Before he had done, Mr. Dymond had infused some of his confidence into his audience, and it was quite pleasant to listen to the compliments which fell from the lips of Messrs. Carteighe and Ince in proposing a vote of thanks to the President.

A PRESCRIBING CHEMIST CENSURED.—Mr. S. F. Langham held an inquiry at the Coroner's Court, Borough, on Monday touching the death of John Halliday, aged seven years, residing at 290 Tabard Street. The mother of the deceased deposed to four of her children, including the deceased, being taken ill six weeks ago, and to calling in a Mr. Edwards, who has a chemist's shop at the corner of Tabard Street, to see them. The Coroner: He is a chemist, is he not? Witness: I do not know. I always thought he was a doctor. I have never been to any one else for the last sixteen years. He came to the house and prescribed for the children. He has been attending the deceased for the last six weeks. The other children got better. Witness said Mr. Edwards had treated them all for measles. On Tuesday last the deceased seemed very bad and they sent for Mr. Edwards, who then told them they had better take the child to the hospital. Eventually Dr. Bedford came, and he ordered the child hot baths and other remedies. Death ensued next morning at 5.30 A.M. Application had been made to Mr. Edwards for a certificate, and then they learned from him that he was unable to give them one. Mr. Robert T. Bedford, M.R.C.S., of Trinity Square, deposed to seeing the deceased on Tuesday night last. He was pulseless and livid, and rolled on the bed in great agony. He came to the conclusion there was either kidney mischief or pressure on the lungs, and that the case had been wrongly treated by Mr. Edwards. The post-mortem examination since made showed that the lungs were bulging on both sides with fluid and that the kidneys were much enlarged and congested. Death was due to the pressure of this fluid upon the lungs. By the Coroner: A medical man would probably have diagnosed the mischief directly on seeing the child, just as witness had done a few hours before the child's death, and would have taken steps to prevent the collection of fluid. The child had been suffering from scarlatina and not measles, and with proper treatment such a state of things as he had found ought not to have occurred. It was difficult to say that death would not have taken place even under proper treatment, but the chances were in favour of the child's recovery. The Coroner severely censured Mr. Edwards for attending and prescribing for patients when he knew he was not qualified to do so. The jury concurred with these observations, and added their censure to the verdict of "Death from natural causes."

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

INLAND REVENUE PROSECUTION.—At the Birmingham Police Court on October 12, before Messrs. J. Lowe and H. P. Ryland, Charles Gibbing Crooke and Solomon Taylor (trading as Crooke & Taylor), wholesale druggists, 1 New Meeting Street, were summoned for violating the Spirits Act of 1830, by mixing methylated spirits with tincture of rhubarb. Mr. Hubert Costello, supervisor of the Inland Revenue, conducted the case for the prosecution, and Mr. Glaisyer (Glaisyer & Porter) defended. On May 12 a bottle of tincture of rhubarb was purchased by George Fife, an Inland Revenue officer, from the defendants. It was forwarded to Somerset House, where the contents were analysed by Geo. Naylor Stokes, who certified that the bottle contained between 10 and 20 per cent. of methylated spirits. In answer to the bench witness said that by substituting methylated spirits for rectified spirits about 15s. a gallon would be saved. There was nothing injurious in it, but it was decidedly disagreeable. Mr. Glaisyer said his clients were totally at a loss to account for the presence of methyl in the preparation, because they were not informed that the bottle contained the spirit until two or three months after it was bought, and therefore were unable to trace it. However, the bench had to deal with the case in the interest of the Inland Revenue, and not the public. Mr. Stokes explained that methylated spirit was excluded by the Pharmaceutical Society because they considered that medicine was quite nasty enough without the

assistance of methylated spirit. The Excise penalty was 100%, but Mr. Costello said that the magistrates had power to reduce the penalty to any extent they liked. Mr. Lowe remarked that it was necessary to put a check upon such practice. A fine of 5*l.* and costs was imposed.

BLACKBURN.

A DOCTOR'S WIFE DISPENSING.—On Friday morning the 7th inst., Mr. H. J. Robinson, Coroner, held an inquest on the body of Jane Lassey, aged 12 weeks, daughter of a moulder. The mother of the deceased stated that the child was taken ill with diarrhoea on the Tuesday, and she took her to the surgery of Dr. Wilson. Mrs. Wilson prescribed for the child, her husband being out at the time. The medicine was given to the child several times, but she continued to get worse, and died at eight o'clock on Wednesday morning. The mother again went to Dr. Wilson's on Wednesday morning, but could not see the doctor. A week previous the child was vaccinated at Dr. Wilson's surgery, the operation being performed by Mrs. Wilson. By a juror: The doctor had never seen the child. Elizabeth Wilson stated that she was the wife of Robert Wilson, physician and surgeon, of 27 St. Thomas's Terrace, Blackburn. She made some medicine for the deceased, which was made up of "creta" and other things. The mixture was a simple one, and had no morphia in it. Last Thursday she saw the child and vaccinated it herself. She had no medical degree, but she did the most part of the dispensing, having been accustomed to it for many years. The Coroner did not think the medicine had done any good, but perhaps it had done no harm. The practice of dispensing medicine without the knowledge of her husband was certainly a dangerous one. A juror: Do you think it is right for her to mix medicine which the doctor has never seen? The Coroner: Certainly not. Another juror remarked that he had heard of Mrs. Wilson doing the same thing regularly. The jury then returned a verdict that the deceased died from natural causes.

Dr. Wilson has since stated in a letter to the *Northern Daily Telegraph* that the ingredients of the mixture were put together by himself; his wife simply took it from a large bottle and put it in a smaller one. This he does not consider to be compounding or dispensing, and his wife does not dispense without his knowledge.

BOLTON.

UNSTAMPED PATENT MEDICINES.—At the Borough Court on Monday, William Simms Weaver, herbalist, of 2 St. George's Road, was summoned for having exposed for sale, on August 8, a certain bottle containing medicine without having a paper wrapper and a label provided by the Commissioners of Inland Revenue affixed. Mr. Fielding defended. Mr. Alban, Somerset House, London, appeared on behalf of the Revenue authorities, and explained that this was, he believed, the first case of its kind which had been brought forward in Bolton. The defendant was a herbalist, carrying on business in St. George's Road, and by this offence, if proved, had subjected himself to a penalty not exceeding 10*l.* Mr. W. D. Herring, an Inland Revenue officer, testified to visiting Weaver's premises and purchasing a bottle of blood-purifying mixture, which had been recommended to the public by posters, and priced at 2*s.* per bottle. The defendant intimated when the purchase was being made that he had to look after himself, and if he put on a condensed label he could let the bottle go for 1*s.* without the Government stamp. As he was handing the bottle to witness he added: I do not sell you that blood-purifying mixture I am advertising. Witness then asked if it was the same, and Weaver replied, "Oh yes; but I am not supposed to be selling you that without stamp. With this label on it you shall have it for 1*s.*, that is, unless you are one of the friends of the Queen." Witness made a suitable reply, and having received the bottle left the shop. Corroborative evidence was given. For the defence, Mr. Fielding asserted that the Inland Revenue authorities seemed to be going about to prevent people from earning an honest livelihood, and pouncing upon them in a most merciless manner. Altogether the Revenue authorities were getting into a most arbitrary set. He did not know whether the Government was getting "hard up" or not, but at any rate there was a good deal of

"screwing" going on at the present time. He contended that it was necessary there should be an "uttering, vending, and exposing" of the medicine, and in this case he submitted there was no proof whatever of exposure from the evidence. The Magistrates gave the case a lengthened consideration, and decided to inflict a fine of 40*s.* and costs, the prosecution being given the right of striking out the words "utter and expose" from the summons. Two other charges of a similar character were preferred against Weaver, but withdrawn on the undertaking that the medicine in future would be stamped, and on the payment of expenses.

CAMBERLEY.

THE MYSTERIOUS POISONING CASE.—Last Saturday Mr. Henry Bowles, whose wife and son died from supposed poisoning on September 22, at Camberley, near Farnham, was arrested and taken before the local magistrate, charged with murder, and remanded. It will be remembered that prisoner stated at the inquest that poisonous fungi had been eaten by deceased; but it was supposed he had had access to poisons, and his conduct was suspicious: hence the arrest.

The prisoner Bowles was the head gardener to Dr. Hugo Müller, ex-President of the Chemical Society. Since the adjourned inquest Dr. Stevenson, of Guy's Hospital, has been making an analysis of the stomachs of deceased, and Dr. Twort, of Camberley, has made a statement to the effect that when he found the young man who died he was calling out loudly for water, and was violently spasmodic and convulsed. It struck Dr. Twort at once that he was suffering from strychnine poisoning. He was perfectly conscious, and was suffering from intermittent convulsions, and the moment his limbs were touched he again went off. Dr. Twort thought it best to go home and get some chloroform in order to stop the convulsions, and accordingly went. On going downstairs he found Mrs. Bowles to be dead. He returned with the chloroform in a very short time, but he then found young Bowles dead. The face was pinched and of a very dark colour, the pupils of the eyes were dilated, the toes were contracted, the fists were clenched so that the nails had pierced the skin of the palms of the hands, and the spine was arched. He had not the slightest doubt but that he died from poisoning, and all the symptoms were those of strychnine poisoning. Along with Dr. Manders he conducted a post-mortem examination of the bodies. In the case of the son they found indications of poison, but there were none so far as the woman was concerned.

The adjourned inquest was resumed on Wednesday at the Cambridge Hotel, Camberley, before Mr. G. F. Roumieu, the coroner for West Surrey. Dr. Stevenson, official analyst to the Home Office, reported the result of the analysis he had made of the stomachs of the deceased. In each he found small quantities of one poison, strychnine. He also found strychnine in a stain on the young man's shirt. Dr. Twort, of Camberley, and Dr. Manders also gave evidence, the facts of which are stated above. Dr. Stevenson, after having heard the medical evidence, was recalled, and said he had no doubt that from the symptoms described death resulted from poisoning by strychnine. Some further evidence was given, and the inquest was adjourned for three weeks.

CLONSILLA, IRELAND.

TEN HORSES POISONED.—A serious case of horse-poisoning has occurred at Clonsilla Station on the Midland and Great Western Railway. Ten valuable animals have succumbed to poison administered, whilst some twenty others are suffering intensely, the recovery of many of them being despaired of. The poison used is supposed to be sugar of lead, given in a bran mash.

GUILDFORD.

EARLY CLOSING.—Messrs. Jeffries, Barry, Wheeler, Snosell, Jacobs, and Martin, chemists and druggists, of Guildford, have announced their agreement to close at 8 P.M. usually, instead of 9 P.M., as heretofore, still closing at 10 P.M. on Saturdays. The agreement, we understand, is unanimous, the one other chemist of the town consenting to it, but objecting to his name appearing on the bills.

HARTLEPOOL.

AN ASSISTANT'S CLAIM.—At the County Court on October 7, Charles Grayson, chemist, of Blandford Street, Hartlepool, sued Mr. Thomas Tweddell, secretary of the Hartlepool's Friendly Societies' Medical Association, for 3*l.* wages alleged to be owing. According to plaintiff's statement, he was acting as dispenser for the association in March last at 80*l.* a year, when Mr. Tweddell told him that as the society was in difficulties he (Grayson) had better look out for another situation. Ultimately plaintiff appeared before the committee, who agreed to give him 3*l.* if he would leave in the course of a week, but he was to be permitted to live on the premises as caretaker. The agreement had not been carried out, and plaintiff called Mr. Watson, the chairman of the committee, to prove that the offer was made to him. Mr. Tweddell, however, denied that the 3*l.* was offered as alleged by plaintiff, and said he received proper notice to leave. He also denied having told plaintiff that the association was in difficulties. They were merely closing the dispensary in which plaintiff was engaged. Ultimately his Honour found for plaintiff for the amount claimed with costs.

LINCOLN.

HORSE-POISONING.—Four valuable horses belonging to Mr. W. H. Morton, of South Carleton Hall, have died through the administration, it is believed, of butter of antimony, given to make them look in fine condition. Two prize colts belonging to Mr. Jackson Everett, of Loughton, near Gainsborough, having died mysteriously, a post-mortem examination of one of them was made, when it was discovered that the stomach was empty, but that the intestines were choked by a quantity of the dog-rose haws, three handfuls of which were taken out.

LIVERPOOL.

MICROSCOPICAL SOCIETY.—At a meeting of this society held on October 7, Mr. A. Norman Tate, F.I.C., F.C.S., was elected president for the ensuing session. In the course of the evening the president read a paper on "The Microscopical Examination of Commercial Fibres."

STRYCHNINE-POISONING.—An inquest was held on Tuesday into the circumstances of the death of a Miss Clark (43), who was found dead in her bed on Sunday morning. The evidence showed that death was due to strychnine-poisoning. Upon a trunk by the side of her bed was a tumbler, the contents of which were discovered to be strychnine and water. The usual verdict was returned.

SERIOUS CHARGE AGAINST A CHEMIST.—At the Liverpool Police Court on October 10, before Mr. J. Henderson, borough magistrate, John Moore, aged about 50, a chemist and druggist, residing in Marsh Lane, Bootle, and keeping a chemist's shop at the corner of Warwick Street and Beaufort Street, Liverpool, was brought up on remand charged with having committed indecent assaults on a number of young girls, whose ages ranged from 11 to 16 years. The prisoner's misconduct was discovered in a peculiar manner, through a constable overhearing a conversation between two of the girls, and then instituting inquiries. The prisoner was committed for trial at the assizes.

MARRIAGE FESTIVITIES.—On the occasion of the marriage of Mr. W. H. Saunders, of the firm of Ayrtton & Saunders, 149 Duke Street, to Miss Lizzie Mearns, Mr. and Mrs. A. H. Saunders invited the principal employes of the firm to dinner on Saturday last. The company, numbering nearly one hundred, was presided over by Mr. A. H. Saunders, the head of the firm, who was supported at the foot of the table by Mr. H. P. Saunders, his eldest son. After dinner the customary toasts were honoured, and some charming songs and recitations were rendered. Dancing followed, and was carried on with great spirit, for some hours. Mr. W. H. Saunders, as a traveller for the firm for many years, is well known to the drug trade at home and abroad, and his bride has been the recipient of many valuable and handsome presents.

MARYPORT.

AERATED-WATER INDUSTRY.—Captain Fox, mineral-water manufacturer, High Street, has purchased large business

premises in Wood Street, Maryport, which he purposes converting into a mineral-water manufactory, and will add new machinery to his present plant. When finished it will be about the largest manufactory in the county.

NEWCASTLE-ON-TYNE.

THE FIRST MEETING for the session of the local pharmaceutical society was held last week, and is reported elsewhere.

MATCH-POISONING.—Last Saturday Christina Dixon Denton (17) attempted to commit suicide by taking a quantity of phosphorus. She swallowed some water in which she had steeped the contents of four boxes of matches. She was admitted to the Newcastle Infirmary, where she still remains.

UNRULY STUDENTS.—Three students have been expelled from the College of Medicine and nine suspended for six months on account of misconduct at the recent inaugural public meeting of the college. On that occasion Sir Lowthian Bell delivered the address, and since the meeting the whole of the offenders have apologised to him, Dr. Heath (president), and the other authorities of the college, and the Sheriff of Newcastle, with the view of being re-admitted.

SHEFFIELD.

THE NEW PREMISES of the Sheffield School of Pharmacy at Fitzalan Square are now ready for occupancy, and about a dozen students commenced practical chemical work in the laboratory on Tuesday evening. The lecture hall is seated for fifty, but will accommodate seventy in a crush.

AN UNSUPPORTED CLAIM.—At the Malton County Court on October 6, before Judge Bedwell, E. Jacobs, carrying on business as "The Yorkshire Patent Veterinary Medicine Manufacturing Company," at Ashdell Road, Sheffield, sued James Yorke & Son, shoeing smiths, of Malton, for 8*l.* 10*s.* for medicines supplied. The plaintiff's case was that his representative, Thomas Markham, called on the defendants in April last, and they agreed to take the patent medicines for sale in the Malton district, and that James Yorke signed a printed order-form which Markham had filled up and read over to him. An announcement on the order-form stated that the goods were taken absolutely, on terms of 5 per cent. cash or three months' net credit. The allegations of the defendants, on the other hand, were that they distinctly refused to take any goods except as agents of the plaintiffs, and that they would remit as sold. The elder Yorke admitted the signing of a form, but he said it was one containing no orders for goods whatever. His Honour interrupted the case before the defendants' solicitor had called all his witnesses, and said, "Verdict for the defendants; and as this case is one of considerable importance, I give costs above the 20*l.* scale."

TYNEMOUTH.

ILLEGAL USE OF METHYLATED SPIRITS.—At the County Petty Sessions at Tynemouth, on Monday, Mary Smalldridge Johnston, who has drug shops at Byker, Wallsend, and Willington Quay, was summoned, at the instance of the Inland Revenue, for infringing the 130th section of the Spirits Act, 1880, by selling a certain article in the preparation of which methylated spirits had been used. Mr. E. Clarke, Newcastle, prosecuted, and stated that Mr. John Flint, supervisor, purchased half a pound of essence of pennyroyal, for which he paid 2*s.* 6*d.*, at the defendant's shop at Willington Quay. It was found on analysis to be manufactured with methylated spirits instead of pure spirits of wine. Mr. C. W. Newlands, who defended, admitted the sale. Mr. Charles Proctor, F.I.C., Government analyst, proved the receipt of the sample from Mr. Flint. On analysis he found it to be an essence of pennyroyal, but it had been prepared with methylated spirits instead of pure spirits of wine. In answer to Mr. Newlands, witness said he would not swear there was no pure spirits of wine in the preparation. The price of half a pound of essence of pennyroyal, manufactured with pure spirits of wine, was 7*s.* 6*d.* Mr. Newlands having addressed the magistrates in mitigation of the penalty, a fine of 5*l.* and costs was imposed.

SCOTLAND.

ABERDEEN.

THE chemists of Macduff have agreed to close their shops at 8 P.M.

DR. JOHN GORDON has been appointed assistant professor of materia medica in the university here.

EDINBURGH.

ALLEGED THEFT FROM DRUGGISTS.—At the Edinburgh Police Court last Saturday, two women were charged with stealing a bottle of Parrish's syrup and a box of tooth-brushes from the shop of Messrs Simpson & Co, druggists, Bristo Street. One pleaded "Not guilty," and the other "Guilty." The detective who arrested the women could only say that the woman who repelled the charge was with the other woman, and the case was therefore adjourned. The case again came on on Monday, when the guilty prisoner got five days and the other was dismissed.

Pharmaceutical Society of Great Britain.

PRELIMINARY EXAMINATION.

Tuesday, October 11, 1887.

LATIN.

(11 A.M. to 12.30 P.M.)

I. (For all Candidates.) Translate into Latin:—

1. In the Roman Commonwealth were many brave citizens.
2. All persons praise diligence and honesty.
3. It is a great thing to be well taught.
4. He cannot write who has never learned.
5. Caesar threw a bridge over the river, in order that his soldiers might cross on foot.

II. Translate into English either A. (Caesar) or B. (Virgil).

A. CAESAR.

1. Die constituta causae dictionis, Orgetorix ad iudicium omnem suam familiam, ad hominum millia decem, undique cogit, et omnes clientes obaeratosque suos, quorum magnum numerum habebat, eodem conduxit: per eos, ne causam diceret, se eripuit. Quum civitas, ob eam rem incitata, armis jus suum exsequi conaretur multitudinemque hominum ex agris magistratus cogerent, Orgetorix mortuus est; neque abest suspicio, ut Helvetii arbitrantur, quin ipse sibi mortem consciverit.

2. Hac oratione habita, mirum in modum conversae sunt omnium mentes, summaque alacritas et cupiditas belli gerendi innata est; princepsque decima legio per tribunos militum ei gratias egit, quod de se optimum iudicium fecisset, seque esse ad bellum gerendum paratissimam confirmavit. Deinde reliquae legiones cum tribunis militum et primorum ordinum centurionibus egerunt, uti Caesaris satisfacerent: se nec unquam dubitasse neque timuisse neque de summa belli suum iudicium, sed imperatoris esse existimavisse.

Grammatical Questions.

(For those Candidates only who take Caesar.)

1. Give the genitive singular and plural of *die*, *iudicium*, *omnes clientes*, *eam rem*, *jus suum*. (Par. 1.)
2. Write the third person singular and plural of the indicative present and subjunctive perfect of the verbs in italics. (Par. 1.)
3. Account for the mood of *fecisset* and *dubitasse*, and for the gender of *paratissimam*. What part of the verb is *gerendum*? (Par. 2.)
4. How are questions asked in Latin? Distinguish between *num* and *nonne*.

B. VIRGIL.

1. Interea magno misceri murmure pontum,
Emissamque hiemem sensit Neptunus, et imis
Stagna refusa vadis, graviter commotus; et alto
Prospiciens, summa placidum caput extulit unda.
Disiectam Aeneae toto videt aequore classem,
Fluctibus oppressos Troes coelique ruina.

2.

Necnon et Tyrit per limina laeta frequentes
Convener, toris jussi discumbere pictis.
Mirantur dona Aeneae, mirantur Idum,
Flagrantisque Dei vultus, simulataque verba,
Pallamque et pictum croceae velamen acantho.
Praecipue infelix, pesti devota futurae,
Expleri mentem nequit, ardesitque tuendo
Phoenissa; et pariter puero donisque movetur.
Ille, ubi complexu Aeneae colloque pependit,
Et magnum falsi implevit genitoris amorem,
Regium petit; haec oculis, haec pectore toto
Haeret, et interdum gremio fovet; iuscia Dido,
Insidat quantus miserae Deus.

Grammatical Questions.

(For those Candidates only who take Virgil.)

1. Give the genitive singular and plural of *magno murmure*, *placidum caput*, *toto aequore*. (Par. 1.)
2. Write the third person singular and plural of the indicative present and subjunctive perfect of the verbs in italics. (Par. 2.)
3. Parse fully:—"inscia Dido, insidat quantus miserae Deus." (Par. 2.)
4. How are questions asked in Latin? Distinguish between *num* and *nonne*.

ARITHMETIC.

(12.30 P.M. to 2 P.M.)

1. Multiply 45 tons 14 cwt. 2 qr. 5 lb. by 205.
 $2\frac{1}{2} \quad 1\frac{1}{2} + 9\frac{1}{11}$
2. Simplify
 $4\frac{2}{3} - 2\frac{1}{3} + 13\frac{7}{11}$
3. Add together .00125 of a ton, .0125 of a cwt., and .025 lb.; and reduce the result to a decimal of 2 qr. 9 lb.
4. A man owns $\frac{3}{15}$ of a mine, and sells $\frac{1}{15}$ of his share; what fraction of the mine has he left?
5. If 2 hectol. 40 lit. cost 3*l.* 6*s.* 8*d.*, what ought to be paid for 1 hectol. 60 lit.?
6. The floor of a room 14 feet by 12 $\frac{1}{2}$ feet being partly covered by a carpet measuring 11 $\frac{1}{2}$ feet by 9 $\frac{3}{4}$ feet, how much floor-cloth will complete the covering, and what will it cost at 6*s.* per square yard?
7. If 5 $\frac{1}{3}$ per cent. is gained by selling at 2*l.* 17*s.* 9*d.* per cwt., what will be the gain per cent. by selling at 7 $\frac{1}{2}$ *d.* per lb.?

ENGLISH.

(3 P.M. to 4.30 P.M.)

(Read carefully the following passage before answering questions 1, 2, and 3, which refer to it.)

"At morn the black-cock trims his jetty wing,
'Tis morning prompts the linnet's blithest lay,
All Nature's children feel the matin spring
Of life reviving, with reviving day;
And while you little bark glides down the bay,
Waiting the stranger on his way again,
Morn's genial influence roused a minstrel gray.
And sweetly o'er the lake was heard thy strain,
Mixed with the sounding harp, O white-haired Allan-bane!"

1. Parse fully the words *at*, *linnet's*, *all*, *while*, *yon*, *rafting*, *roused*, *was heard*, *thy*.
2. Write out, in a tabulated form, the Direct Objects of verbs in the quotation, the Verbs on which they depend, and the Subjects of those verbs.
3. Give a list of all the Adjectives in the passage, with their degrees of comparison.
4. In the following passage supply the necessary capital letters, and put in the stops and inverted commas where requisite:—his lordship answered that's well but i bargained for twenty and then emphatically exclaimed anchor hardy anchor to this the captain replied i suppose my lord admiral collingwood will now take upon himself the direction of affairs not while i live i hope hardy said the dying chief endeavouring in vain to raise himself in his bed no do you anchor hardy on this the captain said shall we make the signal sir yes answered he for if i live i'll anchor.
5. Write a short competition on one of the following subjects:—1. Composition. 2. The importance of early mental training. 3. Westminster Abbey on June 21, 1887. 4. The House of Commons in 1887.

Pharmaceutical Society of Ireland.

ANNUAL GENERAL MEETING.

OCTOBER 3, 1887.

THE following is the full official report. We gave a short account of the meeting last week.

The chair was taken by the outgoing President, Mr. William N. Allen.

The minutes of the last meeting were read and confirmed.

The PRESIDENT said that in consequence of the resignation of Dr. Aquila Smith he had to declare the outgoing five members of the Council, together with Mr. George L. McCormack, the only other member nominated, to be elected for the ensuing three years, consequently there was no occasion to appoint scrutineers. He was glad to be able to congratulate the Society on an increase of 10 in the number of their paying members during the past year. At the Preliminary examinations 42 were examined, of whom 24 passed, as against 40 examined in the previous year, of whom 21 passed; and for the licence 40 were examined, being an increase of 10 over the preceding year. The percentage of failures was 50 per cent. In the Pharmaceutical Society of Great Britain the proportion of rejections at the qualifying examinations during the same period was 57.7. The examinations of their (the Irish) Society had been conducted by the same examiners as before, and in the same satisfactory manner; but he regretted the non-appointment at the last annual meeting of a visiting committee, and also the apathy of members of the Council as regarded attendance at the examinations. In consequence of the important reports of Dr. Duffey to the Privy Council, two of which were considered during the past year, it was the more necessary that the Council should be correctly informed as to what passed at the examinations through the personal observation of its members, in order that they might be the better able to frame replies to the Privy Council. Anyone who had read the replies which had been given must have found in them a complete answer to the complaints which had been made in some quarters against the examinations. The refusal of Sir Michael Hicks Beach to receive a deputation from the Council formed an unpleasant episode in the history of their past year. It was apparent that their hopes for the future must in a great measure lie in themselves. In order to gain the confidence of the public competent knowledge and technical skill would alone aid them; and therefore it was the more important that the Society's standard of capability should be kept up. He was glad to have to notice that successful prosecutions had taken place in Navan and other places in Co. Meath; on the other hand, the recent failures in Dublin and Belfast were much to be regretted.

FINANCE.

Mr. HODGSON, treasurer, next submitted his report for the year. He said the statement was a little more favourable than that of last year. They commenced the year with a balance in hand of 92*l.* 1*s.* 1*d.*, and were ending it with a balance in the bank of 126*l.* 17*s.* 10*d.* In fees for the licence examinations 131*l.* 5*s.* had been received, as against 147*l.* in 1886. They had received in fees for the Preliminary examinations 94*l.* 10*s.* in 1886, as against 98*l.* 14*s.* in the present year; and he was happy to add that they had received in subscriptions 19*l.* 19*s.* more than they did in 1886, the amounts being 55*l.* 13*s.* for fifty-three subscriptions in 1886, and 75*l.* 12*s.* for seventy-two subscriptions this year. For prosecutions they had received from members of the Society subscriptions to the amount of 25*l.*; otherwise the balance would have been seriously against them, as they had spent 38*l.* 14*s.* 8*d.* in prosecutions. But as they had received a total of 39*l.* 1*s.* 4*d.* in connection with prosecutions, the balance was the other way. The payments had been very much as in the year before. They had paid 86*l.* 2*s.* for examiner's fees, as against 73*l.* 10*s.* in the preceding year. They had spent 25*l.* 8*s.* 7*d.* in furniture, but that outlay would not occur again, and the value of it was in the premises; while he was not aware that there was anything due with the exception of a small item for plumbing. So that, although they had had an increased expenditure, their

balance in hand was larger than last year; and adding 248*l.* 3*s.* 1*d.* invested in 3 per cent. stock, the total amounted to 375*l.* 0*s.* 11*d.* to their credit. Still he wished that balance were larger, for his ambition had always been—and he was sure it was shared by every member of the Council—to get the Society into a position to have premises of its own. (Hear, hear.) To that end he would be ready, when the proper time came—and he was sure others would also—to put his hand into his pocket. (Hear, hear.) If they had a house of their own they could appropriate parts of it for a laboratory, chemical lecture room, and in a variety of other ways, for the advantage and development of pharmacy. The account which he handed in had been vouched, and was, he believed, perfectly correct.

The adoption of the treasurer's report was moved by Mr. J. T. HOLMES, seconded by Mr. GRINDLEY, and unanimously agreed to.

ELECTION OF OFFICERS.

The PRESIDENT said the next business was the election of officers. He himself did not seek re-election as President.

Mr. GRINDLEY, in proposing that Mr. J. E. Brunker be their President for the ensuing year, said no member of the Council or of the Society was more competent for the office, inasmuch as he was thoroughly conversant with the Act of Parliament, and had had long experience as President.

The VICE-PRESIDENT, Mr. Draper, said he seconded the motion with all his heart. Mr. Brunker had had a long experience of the presidency, and he (Mr. Draper) had worked happily and comfortably with him during the entire time; and he was sure that no better President had ever sat at that table. Still he could not second the motion with unalloyed pleasure; for he could not do so without a feeling of regret that Mr. Allen after one brief year of office should have found it necessary to resign. He—and he was sure a great many others—had endeavoured to induce Mr. Allen to hold office for another year; but as that gentleman from his engagements had felt it absolutely necessary to resign, he did not continue the pressure.

Mr. DOWNES said there were a large number of original members of the Society still with them who were competent to fill the chair with credit. There was Sir George Owens, whom he would be happy to see in the chair; and there were Dr. Collins and Dr. Montgomery, both past Governors of the Apothecaries' Hall. He did not see why they should turn their backs on those gentlemen. Then there was their treasurer, Mr. Hodgson, who had served in that office for twelve years, and who had been very active and attentive. He moved an amendment that Mr. Hodgson be elected President.

Mr. MERRIN seconded the amendment.

Mr. HODGSON and Dr. COLLINS both intimated that, even if elected, they would be obliged to decline to serve as President in consequence of other occupations, and both urged the election of Mr. Brunker, and the motion was thereupon put and carried unanimously.

Mr. BRUNKER then took the chair amid applause, and said it was with a considerable degree of regret that he again occupied the chair. He had hoped that Mr. Allen would continue in the office that he had so ably filled during the past year. He knew from experience the amount of work that the President had to do, and he also knew that it had been by no means less than in former years during Mr. Allen's year of office, and that he had devoted an enormous amount of time and attention to the interests of the Society. The attention that he had paid to the examinations and to other difficult matters during the past year showed that he was well worthy to fill the chair for many a year to come. He therefore regretted very much that Mr. Allen had expressed a determination not to continue in the chair, and as for himself, he could not resist the pressure which had been so strongly brought to bear on him. The office was not a light one at the present moment, and he knew from the signs about them that during the coming year a great deal would have to be done. He thanked them for the honour they had done him by again electing him. (Applause.)

On the motion of Mr. HODGSON, seconded by Mr. ALLEN, Mr. Draper was unanimously re-elected Vice-President.

Mr. HAYES proposed the re-election of Mr. Hodgson as treasurer. He had done his work thoroughly well during the past twelve years, and had kept the accounts in a most

admirable manner. They owed him a debt of gratitude for all the trouble he had taken in a thankless office.

Mr. DOWNES rose to a point of order. It appeared to him that this and other offices should be filled up by the Council, and not at the general meeting.

The PRESIDENT said that under the by-laws, which had been sanctioned by the Lord Lieutenant and Privy Council, provision was made for the election of the "officers" at the "annual meeting." This had been done for the last twelve years, and, following that precedent, he must rule against Mr. Downes.

Mr. SIMPSON having seconded the motion, Mr. Hodgson was re-elected unanimously.

Dr. COLLINS proposed that the thanks of the Society be given to Mr. Allen for the able manner in which he had discharged the duties of President during the past year. He warmly complimented him on the value of his services.

Mr. WELLS seconded the motion, which was passed and suitably acknowledged.

Messrs. Hayes and Simpson were re-elected auditors, and Mr. Ferrall was re-appointed to the office of registrar.

Mr. Hodgson, Dr. Montgomery, and the President spoke highly of the value of Mr. Ferrall's services.

The members of the Law and Certificates Committees were appointed.

ATTENDANCE AT COMMITTEE MEETINGS.

Mr. ALLEN moved, pursuant to notice, that in future the attendances of each member of the Council on committees during the year be given in the papers for the election of the Council. He thought this a matter of simple justice to the members who did attend the committees. During his year of office he attended nineteen committee meetings, besides attending at examinations.

Mr. WELLS seconded the motion.

Mr. DOWNES moved an amendment that the matter be referred to the Council. This was seconded by Mr. HAYES, and carried by nine votes to eight.

THE LAW PROCEEDINGS.

Mr. DOWNES moved that the Council be requested to appoint another solicitor. The Society had lost prestige through the failure of recent prosecutions in Dublin.

The motion was not seconded.

The PRESIDENT said the Society had a solicitor who on former occasions had conducted their business with success. In reference to another matter he wished to clear away some misconceptions. The Council had no power to create a second grade of licentiates consisting of chemists or druggists who would be entitled to sell poisons but not to compound prescriptions. This would appear on a reference to the preamble of their Act which stated that "a great deficiency existed through Ireland of establishments and shops for the sale of medicines and compounding of prescriptions," and that it was "expedient that provision should be made for the formation of a Pharmaceutical Society, and for the examination of persons desiring to keep open shop for the purposes aforesaid, and for the registration of such of the said persons as may be found on examination to possess a competent practical knowledge of pharmaceutical and general chemistry, and other branches of useful knowledge, as fit persons to keep open shop for the dispensing and compounding of prescriptions of duly qualified medical practitioners." So that the Council were only authorised to license persons who would be qualified to dispense medical prescriptions. The acceptance of a grade styled "chemists and druggists" under their Act would only lead to the foundation of two sets of men having equal rights as regards their dealings with the public, and only differing in the severity of the examination which they had passed. The Council of the day were therefore wise in adopting one grade. No doubt some persons thought it was a pity that the Council had not power to qualify an inferior grade, who could sell poisons without being competent to exercise the other functions of a pharmaceutical chemist; but to obtain such powers legislation would be necessary. That time last year he expressed a hope that they would have some legislation during the year, but Sir Michael Hicks Beach had disappointed them, declining to receive a deputation from the Society, and suggesting that what they wanted should be done by a private member of Parliament. They had seen

that a member of the House of Lords had evinced a great interest in pharmaceutical matters in England, and he (President) intended to ascertain from his Lordship whether he was inclined to take up the question of the amendment of the Pharmacy Act of Ireland. At the same time gentlemen should remember that if they went to Parliament they could not expect to have everything their own way. They should be prepared to encounter opposing interests.

Mr. HODGSON expressed regret that a power of registering all those persons who were in business prior to the passing of the Act, and who were protected by it, had not been secured to the Council. Now they were in a state of chaos. If they prosecuted a person for selling poisons without being entitled to do so, they generally found it very hard to prove that he was not in business before the passing of the Act.

Dr. TICHBORNE remarked that six years ago they nearly succeeded in putting that matter right, but owing to the political unrest and changes of government it dropped through.

Mr. HAYES said that if members had attended in court during one of the prosecutions referred to they would have been able to assist the solicitor.

The motion of Mr. Downes not being seconded fell to the ground.

The proceedings then terminated.

COUNCIL MEETING.

THE monthly meeting of the Council was held on Wednesday the 5th inst. Present, the President, Mr. J. E. Brunker, M.A., in the chair; Vice-President (Mr. Draper), Mr. W. Allen (ex-President), Sir George Owens, Dr. Collins, Messrs. McCormack, Beggs, Wells, Charles Evans, Grindley, Hodgson (Treasurer), and Dr. Montgomery.

A letter was received from Mr. Alexander C. Doran, thanking the Council for their letter expressing sympathy with him in his recent domestic bereavement.

THE PRIVY COUNCIL'S VIEWS.

A letter dated September 28, from Mr. W. L. Neville, acting clerk of the Privy Council, was received in reference to a resolution passed by the Council on April 6 last, and a rider subsequently suggested to be added to it. The resolution was as follows:—

Any candidate who presents himself for examination and shall receive an examination paper in due course from an examiner, shall be regarded as a rejected candidate if he does not attend the examination throughout.

The rider was:—

Unless before retiring he shall have made the necessary number of marks to satisfy the examiner.

The letter stated that the law officers of the Crown had made the following observations upon the rider:—"The amendment suggested partly removes the apparent hardship already pointed out, but it does not apply to the case of a candidate who before making the number of marks is temporarily compelled to leave. 'Number of marks' appears in the amendment to mean number on all the papers and subjects, and not merely the number on the particular paper. Is this intended?"

The PRESIDENT: The law officers do not appear to have grasped what the intention of this proposed by-law is. It did not refer to a temporary retirement of a candidate from examination at all, but to his total withdrawal after having come in on the first day.

Dr. COLLINS: Does it provide for the case of a young man getting ill and being obliged to withdraw after having gone through half of his examination; would no allowance be made for him?

The PRESIDENT: That is evidently the case that the law officers have in view.

Mr. WELLS: If a man were to withdraw after two days and did not appear again, even though it was from illness, would we have power to allow him to come up again after three months?

Mr. ALLEN: We have done so.

Mr. WELLS said that in a case in which that was done it turned out that there had been an abuse. The young man

withdrew stating that he was ill; and he was allowed to come in for examination again at the end of three months. Afterwards when his marks in the first examination were investigated it was found that he would have been plucked, even though he had remained.

The PRESIDENT: The objection of the law officers is that under the rider suggested a candidate who, after having passed part of his examination, should be obliged to retire in consequence of indisposition, would not be able to come up again for six months.

Dr. COLLINS: The same thing occurred to my mind, namely, that you should make some provision for illness. Of course a man might pretend illness, but there will not be very many such cases I fancy.

Dr. COLLINS then moved:—

That the following be an additional rider to the resolution number one, April 1—"Or unless his absence shall be occasioned by illness certified by a medical certificate."

The VICE-PRESIDENT seconded the motion, which was unanimously agreed to.

Mr. WELLS: A explanation should be given to the law officers of the Crown as well.

The PRESIDENT: Yes; I undertake to draft a letter.

A letter from the acting clerk of the Privy Council enclosed an order in council approving of the temporary appointment of Dr. J. W. Moore as examiner at the Preliminary examination during the absence of Dr. H. C. Tweedy.

THE CURRICULUM.

A report from the Certificates Committee was submitted.

The PRESIDENT said it appeared from one of the certificates that a candidate had attended twenty-three out of thirty working days in a period of three months.

Mr. WELLS: Has our resolution requiring one hundred working hours in three months been passed by the Privy Council yet?

The PRESIDENT: It is before them along with other resolutions.

On the motion of Mr. Hodgson, seconded by Mr. Beggs, a report of the Law Committee was adopted.

Mr. John Joseph Sewell, of Killarney, was admitted a member of the Society.

NEW LEGISLATION.

The PRESIDENT: I intend to write at once to the Earl of Milltown and ascertain from him whether he can do anything for us. He may be passing through town, and may give me a personal interview.

Some financial business having been disposed of the Council adjourned.

OCTOBER EXAMINATIONS.

PASSED PRELIMINARY CANDIDATES.

Armour, Richard, 13 Canal Street, Newry.	McGrath, James, 2 Dublin Street, Carlow.
Devlin, Peter John, The Medical Hall, Lismore.	Shanks, John Bailey, High Street, Hollywood.
Herriott, David, 19 Castle Street, Sligo.	Wallace, John, 59 Antrim Road, Belfast.

PASSED LICENCE CANDIDATES.

Allen, Alexander Ferguson, 29 Heytesbury Street, Dublin.	Robinson, John Simpson, 9 Duggan Place, Rathmines.
Maxwell, Robert Wagner, 7 Longwood Avenue, Dublin.	Rousselle, Robert Joseph, 107 Grafton Street, Dublin.
Robb, Samuel, 8 Cavendish Row, Dublin.	Walker, Edward, 3 Lower Sackville Street, Dublin.

NORTH OF ENGLAND PHARMACEUTICAL ASSOCIATION.

THE annual meeting was held in the council room of the Mining Institute, Newcastle-on-Tyne, on Thursday, October 6, 1887, Mr. N. H. Martin, F.L.S., President, in the chair. The minutes of the last general meeting were read by the hon. secretary, Mr. C. B. Ford. According to the report of the Council, the Association now numbers seventy-five members and sixty-one associates; the library contains 185 volumes. Five students attended the chemistry classes, and ten each the botany and pharmacy and materia medica classes. After examination at the end of the session, the prize in chemistry was awarded to Mr. J. Adamson, in botany to Mr. R. W. Maillard, in pharmacy and materia medica to Mr. H. Spargo. An extra prize in materia medica, given by Mr. J. Watson, was awarded to Mr. R. W. Maillard.

The hon. treasurer, Mr. T. Rheeder, reported that the Association was indebted to the treasurer a few pounds, but that several members and associates had not yet paid their subscriptions.

The President moved the adoption of the report, which was seconded by Mr. Clague. In the discussion which followed the reading of the reports Mr. B. S. Proctor (Vice-President) proposed, and Mr. G. Foggan seconded, the following motion:—

That it be a direction to the incoming Council to at once reduce the expenditure by giving up the rooms rented by the Association.

Mr. J. Harrison (Vice-President) proposed as an amendment—

That the question of the advisability of giving up the rooms be left to the incoming Council to decide, and that immediate steps be taken to increase the membership.

Mr. T. M. Clague seconded the amendment, as he thought it fully met the wishes of Mr. Proctor. He felt, however, that the prospect of obtaining an addition to the list of members and associates was not a very hopeful one. The amendment was carried.

The lecturers reported on their respective classes, and alluded to the good work done by some of the students, and Professor Bedson especially mentioned the excellent work done by two of the students in the chemistry class. Professor Bedson went on to say that "these facts warrant the hope that the Association will continue its missionary efforts, which will in time be rewarded by a larger proportion of the hard-working and industrious students amongst those who make the personal sacrifice to enable them to benefit by the opportunities the Association brings within their reach."

The prizes were then distributed by Mr. J. Harrison to the students with appropriate remarks.

The President then delivered the following address:—

GENTLEMEN,—It has been with a feeling of considerable depression that I have contemplated the duty which by your rules is laid upon me to-night, and I have endeavoured to discover and analyse the cause. It is not in the least that I have lost faith in the efficacy of what I believe to be the remedy for the ills which confront the chemists and druggists of this country, or that I doubt that the machinery of this Association might be made a factor to accomplish a useful purpose. No; the depression arises from the conviction forced upon me by the past two years' experience, that the registered chemists as a body do not believe in education, and do not want it, and that nothing short of compulsion will make them seek it. When I think of all that has been said and written upon the advantages of education, how the pages of the *Pharmaceutical Journal* have for forty years and more teemed with advice on the subject, I cannot but reflect that the probability of my being able to say anything which may in the least degree help to arouse chemists from their lethargy is remote indeed. Under these circumstances I should much have preferred to remain silent, but as it is from no choice of mine that I must speak, I must once again tell you something of my opinions. The reports which have been read in your hearing tell you in language more eloquent than I can use that the interest which was aroused two years ago by the anticipation of the curriculum has considerably diminished, and that there is danger of its dwindling to such a point that our Association will collapse, and

COINCIDENTAL.—A French paper brings two items of news in juxtaposition which surely can have no relation with each other. They run as follows:—"M. le Dr. — has been appointed chief physician to the Hôpital de la Charité." "Orders have been issued by the authorities for the immediate extension of the Cimetière de Parnasse."

the labour and money which have already been spent be sacrificed. This will be a disappointment to some of us who have laboured on behalf of the Association, and by none will the grief be more keenly felt than by myself; but if it must and does come to pass that in this North of England there is so little faith in a better education for the pharmacists that it is not worth the effort to support a local school of pharmacy, I have no doubt we shall in time get over our disappointment and grief.

Last year I alluded to the unsatisfactory condition of our business. To-day the evils are accentuated, and a condition of affairs is being brought about that will make our registration simply meaningless. In two recent legal decisions it has been decided that a corporation is not a person under the meaning of the Pharmacy Act, and that such a corporation, if it employs a registered individual to sell and dispense poisons, is exempt from its provisions. One cannot avoid asking, Is it likely that those who framed the Act of 1868, and were careful to lay down with so much precision the conditions for selling poisons, would, in the interest of the public, have neglected to provide that any company who might thereafter sell poisons should employ a registered assistant? As no such provision is made, and the company may from time to time have in its employ either qualified or unqualified assistants, I think the inference is fair that Parliament never contemplated companies performing the functions of chemists and druggists. These decisions cannot fail to have a potent influence upon the distribution of drugs in this country in the future, and already we hear of a number of limited liability companies starting in all directions, and of something very like a panic possessing legitimate chemists and druggists. It would be easy, and perhaps not altogether unprofitable, to trace how, step by step, those upon whom was conferred the privilege of registration under the Pharmacy Act have neglected their opportunities to become educated, and have failed to influence the public to demand careful and intelligent service in the distribution of drugs by lending themselves to the distribution of quack medicines. The things themselves bore a good profit, and there was no labour, not even to think, in handling the pills of others. Printed matter was poured in upon the chemist, and his name, without a farthing of expense to himself, was a household word as the agent of "Old Parr." Moreover, the things sold like "hot cross buns," and the 1s. 1½d., 2s. 9d., and 4s. 6d. told up a goodly sum in the day's return. The weak point was, and is, that anybody else could sell "hot cross buns," or "Old Parr's Pills," and sell them a farthing or threepence cheaper than he could do. It does not need education, or special training, or high moral character to dispense such wares, and so it was no wonder that men who wanted a bait to trap customers, and did not desire to sell their own goods without a profit, should seize upon things possessing such great advantages for their purpose as patent medicines. And so it went on from one step to another until these vendors of patent medicines have found the means of driving the proverbial coach-and-four, through our Pharmacy Act. Two courses are now open to us. The one is to endeavour to fight these interlopers with their own weapons, and thereby confess that we were, and are, unworthy of the privileges conferred upon us by the Pharmacy Act, and to demand from our fellow-countrymen the reward we have hitherto expected for our services. The other is, to look the situation sternly in the face, to realise the fact that a serious breach is made in our walls, and that if we are to hold our own and retain, or I might almost say regain, the confidence of the medical men and the public, no time is to be lost in setting our house in order. If, as a body, we adopt the first course, there must very soon come the survival of the fittest in the person of the capitalist. The large capitalist is the only one who can honestly compete with the prices at which co-operative societies may choose to sell drugs, and for most chemists and druggists, with the amount of capital in money which has hitherto been sufficient to carry on a retail business, it must be only a more or less prolonged struggle; but their final extinction is certain. I do not yet believe, however, that our countrymen will prefer to be dosed with drugs by the pound or the ton, simply because the drugs are cheap as well as nasty; but that their choice in the future will be, as in the past, to prefer to pay the chemist who has inspired in them confidence in his skill and ability for the single dose rather than purchase a dozen doses from a man whose only

claim upon their notice was that he sold physic cheap. For this reason I am convinced that, if the distribution of drugs leaves the registered chemists and druggists, to be taken up by capitalists and companies, it will be as a consequence, and only as a consequence, of the former having neglected to qualify themselves, by education and superior training, to influence their customers and the public to come to them and ungrudgingly pay them a suitable reward for honest and faithful service.

I said just now we should begin in sober earnest to put our house in order. There are two directions in which this is to be done—by education, and by political action. I place them, and will consider them, in the order of their importance. At the present time there is probably no word so frequently on men's lips, and no subject which occupies so large a share of their thoughts, as education. We have been told *ad nauseam* that whatever position of equality or supremacy we have gained amongst the nations of the world is being seriously imperilled by the superior education of other nations. I do not stay to inquire into the accuracy of this statement, but will, if you please, take it for granted. Before I proceed, however, to consider education in its relation to pharmacy, I should like to say one word upon the general subject. If we study the demands of the people, and observe how those who should be teachers and pioneers of learning respond to their appeals, it will be seen there is a great danger that, in our eagerness to supply the education which is giving other countries advantages, we make our English people "Jacks of all trades, and masters of none." There is at the present moment a rage for "useful knowledge," the word "useful" being taken to mean something which at an early period can be converted into money. Hence, we have our evening classes and popular lectures, by which men are led to think that subjects which are worthy the whole powers of mind and body for no inconsiderable part of a man's life can be studied and learnt in the dregs of time after men have given the best of their powers to commerce or toil. Such practices have produced an impatience of prolonged study, and we see colleges and schools, instead of insisting that education (which is the art of cultivating and developing the physical, intellectual, and moral faculties of men, and is of necessity a slow and gradual process, and must, to be successful, have time) cut down their schemes of education to the barest possible limit that the mind can perform certain gymnastic exercises in the subjects taught, called "passing the examination." I say all this has a most pernicious effect on real and thorough education, and will have but a very small influence in enabling England to hold her own in the race of nations. England had a Nelson and a Wellington, a Faraday, a Dalton, and a Turner long before this craze for universal knowledge seized everybody; and if she still can boast of a General Roberts, a Roscoe, and an Armstrong, and a Ruskin, it is because there are men who have not come under the influence of modern views, or who, in spite of them, concentrate the best powers of mind and body in the prosecution of some one subject worthy of such devotion. But enough of this; a longer time than I can spare would not do justice to the subject. I only refer to it because the same spirit prevails in pharmaceutical education, and is the chief factor in its failure.

I will pass over the education considered necessary for the Preliminary examination, and content myself with remarking that, meagre as is the total amount of information in classics and mathematics which is demanded from the student, the examiners appear to use an exceedingly open sieve, and to pass through it young men to whom it would be a positive kindness to suggest they were taking a wrong step in devoting their limited capacities and attainments to the pursuit of the sciences essential to produce a pharmacist.

I will at once pass on to the means provided for education in the technical subjects of pharmacy; and, as members of the Pharmaceutical Society, we may not be considered unreasonable if we turn to the syllabus of our own school of Pharmacy at Bloomsbury Square, and question as to how far that fulfils, or comes short of, our ideal. This will possess the greater interest for us because there have been within recent years changes in connection with the methods and the *personnel* of teaching which we shall find of interest. Two such honoured names as Redwood and Bentley have disappeared from the active teaching staff, although happily

the individuals are still amongst us, and it is to be hoped their ripe experience and wisdom may be available to counsel and advise the younger generation.

It will be remembered by some of us who studied at Bloomsbury Square that, under the old *régime*, the session extended over the ten months, from October to July, and that the lecturer on chemistry whilst he expounded the doctrines and principles of his science, taught and illustrated many of their practical applications in pharmacy; and the lecturer on botany applied the teachings of that science to the education of his students in a knowledge of that all-important subject, *materia medica*. But, *Tempora mutantur et nos mutamur in illis*, and when we come to study the latest syllabus of the School of Pharmacy of the Pharmaceutical Society of Great Britain, we find the session is cut down to five months. Let us take the subjects as they are detailed in the list, and inquire into the effect of this change. The first subject is chemistry, and after carefully reading the schedule of Professor Dunstan's lectures on pages 5 and 6, I am bound to say that, without in the least degree doubting the Professor's ability to compress into the time from October to February all that is there stated, I do most emphatically question whether his best student can do justice to such a course in the time allotted. And ought the amount of work to be accomplished to be adapted to the capacity of the brilliant student or to the average one? It is true we are told in the introductory paragraphs that the course is repeated from March to July, and that the experimental illustrations in the second course differ from those in the first to such an extent as to make the second course valuable, and I presume desirable, on the part of the student; although how this latter statement can be quite reconciled with the fact specifically mentioned that each course is "experimentally illustrated in the fullest manner possible" is more than I can explain. I think it means that the Pharmaceutical Council have, in effect, sanctioned the idea that facts twice stated, however hurriedly, are educationally of more value than when the same facts are taught over a period sufficiently prolonged to allow of the complete assimilation and digestion of them. In the next subject—"practical chemistry"—it is more easy to adapt the method to the exigencies of students, in consequence of their pursuing their studies independently of each other; so that I may pass over this with no other remark than to express the hope that the majority of those whose privilege it is to study at Bloomsbury Square will remain under Professor Atfield's careful tuition for the full ten months, and as many hours of as many days of that period as they can reasonably spare from their other subjects. The retirement of Professor Bentley, who combined the subjects of botany and *materia medica*, necessitated the appointment of another Professor, and has given us an opportunity of becoming acquainted with the views of the Pharmaceutical Council as to the relative importance to the pharmacist of these two subjects. It is not now my concern to offer any opinion as to the intrinsic value as a science of either botany or *materia medica*. I am only concerned to consider the teaching of these subjects in their relation to the practical work which the pharmacist has to perform. In this sense I differ entirely from the Council. Botany, however fascinating and valuable as a science, is of importance to the pharmacist chiefly as the handmaid and interpreter of *materia medica*, and more time and attention should be bestowed on the latter than on the former. What do we find? To botany is given up all the time, and *materia medica* is relegated to a course of demonstrations in which the teacher is to set forth "the habitats and methods of cultivation of the plants yielding articles of *materia medica*, and the mode of preparing drugs for the market, will be described, as well as the different qualities of drugs, and the substitutions, accidental admixtures, and possible adulterations to which they are liable."

"The diagnostic characters and physical and morphological peculiarities of each drug will be indicated, and the histological structure demonstrated so far as it relates to the tissues in which the active ingredients are present, and to the utilisation of such knowledge in determining the purity of powdered drugs," of 17-05 drugs per hour for twenty hours. When, gentlemen, I read that portion of the syllabus I rubbed my eyes, and if I had been a little older I should have polished my spectacles. That *materia medica*, which is, *par excellence*, the subject with which pharmacists should be

acquainted, can, in the opinion of our Council, be taught in such a manner is to me an astounding revelation. I presume the Council consider the subject can be taught and learnt in this way, because I remember the righteous indignation which has been expressed by some members of Council against certain heterodox methods called "cram." The name of Mr. Holmes as an authority on the subject is so well known that we are bound to consider the exigencies of the case have alone driven him to adopt such a purely artificial system of teaching as to arrange the 341 drugs as roots, barks, leaves, &c., and thus to present to the student at one lecture substances with so few natural affinities as aconite, calumba, senega, ipecacuanha, and so on. It may occasionally in lecturing be advisable to show students other roots, barks, or leaves, which more or less resemble the one that is being described, but to carry this to such a point as to bring together leaves so little likely to be confounded as aconite and buchu in my opinion scarcely compensates for the many disadvantages which are features of the method. It is with a feeling of relief that I am able to turn from such adverse criticism to express my warm approval of the syllabus of pharmacy and practical pharmacy, which is now amplified and announced to be taught in a manner worthy of the Society's School of Pharmacy.

I think you will gather from what I have said that in my opinion pharmaceutical education at its fountain-head is in an unsatisfactory condition, and the Council might well have spent much of the time and some of the money which have gone in other directions to a scheme for putting the School of Pharmacy on a basis that it shall be equal to fully training men, and be a model for all other Schools of Pharmacy to copy.

I have already occupied so much of your time in a consideration of the subject of education that my remarks on political action must be brief. By political action I do not primarily refer to legislation by Parliament. As registered chemists and druggists we shall do well not to wait for Acts of Parliament to help us. We have in the Pharmaceutical Society, if adequately supported, the means of accomplishing much that will benefit us; if we use all our privileges to render ourselves more worthy of legislative care it will greatly facilitate the obtaining of any desired Act of Parliament when opportunity arises.

As the Council of the Pharmaceutical Society is the executive through which the wishes and commands of the members must be carried into effect, the persons chosen and the method of their election is of the highest importance. Anyone who will consult the results of the poll for members of Council will observe what gives indication of a certain feeling of prejudice against London members. In the earlier years of the Society the Council was mainly composed of London members, and later, when the country members had increased in number, we still found London men headed the lists; but now, without depreciating the merit of those provincial gentlemen who head the poll, we may feel surprised that London members who have done valiant service for the Society are placed so low in the list. There is no doubt but that such a proceeding on the part of the members of the Society may operate by deterring good men in London from coming forward as candidates for the Council. This cannot fail to be harmful to the best interests of the Society, as it is well known that the arduous and almost continuous duties which are demanded from, and cheerfully performed by, the President of the Society could not be as efficiently rendered by any provincial member. The same, perhaps in a less degree only, will apply to the treasurer, and to some others upon whom must devolve the carrying out of many details of executive work. At the last election, gentlemen, our treasurer, who has done such good service for seven years, was at the bottom of the poll of elected members; and another old member of Council, who has devoted a considerable amount of care and time to the work of the Society, was displaced, and has only found a seat on the Council in consequence of the resignation of another valuable London member, one of the ex-Presidents of the Society. It is not for me to dictate to the members and associates for whom they shall vote; but, speaking as a country member to my fellow-members in the provinces, I would ask them to think not of the present only, but also of the future of pharmacy, and to vote for a larger proportion of men who, by their

qualification and residence in London, will be able to do more effective work for the Society.

In conclusion, let me quote the dictum of Professor Leech in his paper on the "Future of Pharmacy," that, "if pharmacy is to hold its own, each pharmacist must be in the future the guarantor of the purities of the medicines he dispenses, not the mere distributor." This can only be attained through careful systematic education, and a thorough co-operation with the aims of the Pharmaceutical Society.

After a vote of thanks had been passed to the President for his address, the officers and Council were re-elected, the only change being that Alderman Owen was chosen for the position of Vice-President, in the place of Mr. B. S. Proctor, who preferred to retire. A vote of thanks was passed to Mr. Proctor for his past services.

SHEFFIELD PHARMACEUTICAL AND CHEMICAL SOCIETY.

THE third session of the school of pharmacy in connection with this society was inaugurated on Wednesday evening, in the Cutlers' Hall, Sheffield. The meeting was one of exceptional interest, Mr. Carteighe, president of the Pharmaceutical Society, with several leading pharmacists from other towns, being present. A small but interesting exhibit of pharmaceutical curios, botanical specimens, and microscopic objects, under the care of Mr. Grierson, one of the honorary secretaries of the Association, served to pass the time agreeably from 7 to 7.30, when Mr. Furness, president of the society, accompanied by Mr. Carteighe and Mr. Humphrey (honorary secretary), ascended the platform. Amongst those present were Mr. F. B. Bengier (president, Pharmaceutical Conference), Dr. Symes (Liverpool), Mr. Radley (Southport), Mr. A. H. Allen (president, Society of Public Analysts), and Messrs. Newsholme, Cubley, Preston, Fox, Ward, Kirkby, Bradwell, Ellinor, Watson, Dobb, junr., Morrison, and other Sheffield pharmacists. A score of ladies were present, the company altogether numbering over seventy.

THE PRESIDENT'S ADDRESS.

MR. FURNESS, in opening the proceedings, said he believed that never since its establishment had this society commenced a session under more favourable circumstances. Many of the students before him, no doubt, would have a very vague and ill-defined impression of the business they had embarked in. Having warned them not to be despondent if their youthful expectations were not realised, he referred to the history of the profession they had adopted. They formed—or, rather, should form—an integral part of the healing art, sometimes called the "fourth estate" of medicine. They could trace and boast a long historical record. Theirs might be designated with truth a philanthropic calling. There was nothing in it to prevent any of its devotees aspiring to and attaining the highest social, public, or scientific position. They were rapidly losing the more strictly commercial part of their calling, to which they had hitherto had a claim, and what was called enterprise was driving their more scientific resources into the hands of a select few, so that by many their craft was thought to be in danger. He did not, however, share these views. In the past they might have occasionally poached upon the preserves of other trades, but until quite recently their own domains had been free from intrusion. Theirs was a business which could not be carried on with any ordinary amount of commercial profit. The public had accepted the iniquitous system which had been forced upon them by the unscrupulous combination of traders. How long the senseless cutting trade in medicines would be tolerated was a difficult question to answer. Perhaps so long as the iniquitous system was attended with no more glaring dangers than had yet been manifested it would only be destructive to the many chemists and druggists whom it considerably affected. A revival in trade or a few serious mishaps might produce a healthier tone, and restore the vending and compounding of drugs to its legitimate channels. He did not think medical men as a body were disposed to relinquish the pharmacy portion of their practice. They should let the medical profession understand that it would be inimical to their interests to retain their position

as dispensers of medicine, which was capable of no excuse except that of expediency to themselves. He also spoke about medical men lending their name and using preparations for the purpose of advertising the various nostrums. In conclusion he referred to the history of the Pharmaceutical Society, and gave words of advice to the students as to their future labours.

The Chairman afterwards called upon Mr. Carteighe to distribute the prizes, speaking in eulogistic terms of the accomplishments and labours of that gentleman.

Mr. Carteighe then presented the prizes, giving a few words of counsel and congratulation to each recipient.

The following is a list of the prize winners:—Betany: 1, T. L. Holleley; 2 (special prize by lecturer), A. S. Smith; materia medica, H. Smith; chemistry, J. T. Ellinor; practical chemistry: 1, J. H. Golland; 2 (special prize by lecturer), J. T. Ellinor. The President's prize for proficiency in all subjects was gained by J. T. Ellinor.

A VOICE FROM LONDON.

MR. CARTEIGHE, who was very warmly received, said he felt himself placed in a somewhat embarrassing position after the eloquent address of their President by the request that he would "say something" to his Yorkshire brethren. He had been under the impression that it would be his high and honourable privilege to present the prizes to the successful students. In accepting that honour he felt that it was a compliment paid to the Pharmaceutical Society, and that it was in his capacity as its President that he was present. He congratulated them all on the fact that they had a school, and he congratulated the students on their success. But the thing above all others which was a subject of congratulation was that this and kindred associations placed before students on the very threshold of their career the means of obtaining a knowledge of what they would have to do. He held that the chemists and druggists of the future should begin, as soon as they were apprenticed, not only to work at the mechanical part of the craft but at the scientific principles on which that craft was based. Whatever they might do in London in the way of keeping up a typical school must always be limited in regard to the number of students influenced; it was obviously their duty, therefore, to the body of the trade and to the public to encourage such associations as this in carrying on such work. Some of those around him had been connected with pharmacy for something like twenty years—some of them for a much longer period—and they had had some experience in the birth of local associations and local schools. They knew that in many cases there had been deaths as well as births of local associations, and that a good many schools had gradually lapsed. There was a great deal of difficulty, as regards pharmaceutical education, in convincing parents and guardians—and in many cases principals who were taking apprentices—of the importance of the latter beginning to read and work at botany, chemistry, and the materia medica at the same time that they began their ordinary shopwork. Apprentices did not want to go through their work in a mechanical way for three or four years without knowing something of the reasons which should guide them in the operations they were carrying out. By such a course the interest of their work was destroyed, and they became at twenty-one mere machines. Many of the candidates who came before the Board of Examiners in London showed that they were mere pharmaceutical machines, and he feared this was not always the fault of the candidates. It was in view of the difficulties which had been placed in the way of apprentices and assistants getting knowledge early in their career that many local associations—of which that in Sheffield was a typical one—had started systematic courses of lectures and instruction. He congratulated the Sheffield Association and the students on the very satisfactory way in which they appeared to be going on. He congratulated them that there were in Sheffield men who were most competent to teach, and who were willing to devote themselves to the work *con amore*. The work they had to do in the course of a session was undoubtedly excessive, and the remuneration upon the low scale of fees which were charged must be very little. He presumed that those gentlemen must be willing for the good of their craft and for the advancement of the apprentices to give the work of their brains and their skill as teachers for practically nothing. Personally, and as a representative of the pharmaceutical body, he was

deeply grateful to them for doing so. Their willingness to do this was, he thought, a good sign of the times. The Pharmaceutical Society, as most of them knew, was founded and was practically carried on by voluntary work, and it was gratifying to know that similar voluntary effort was forthcoming in a big town like Sheffield. Perhaps in course of time the school would get larger, and duties of the teachers become so much more important that they would be compelled to ask a somewhat higher fee. He was quite sure that parents and guardians understood that this was a craft that required something more than mere knowledge of the secrets of the trade; and apprentices and their parents and guardians should be willing to give further time and, if need be, money also for obtaining that part of their education which principals had not always the means of affording. It was perfectly obvious that principals personally were not always able, and some were not willing, to teach their apprentices every subject which was required by the examiners. All that the principal could do, and that it seemed to him should do, was to encourage and to give facilities for the acquirement by his apprentice of that scientific knowledge which he did not undertake to give during the term of apprenticeship. It could not be too strongly urged that there was a great advantage in an apprentice beginning by taking one course of lectures, and then following it up by other courses. He might begin with theoretical chemistry, the next year he could take up *materia medica*, the third year he should take botany, and the last year he might take practical chemistry. Now the actual loss of time to a principal, if the teaching was done in the ordinary working hours, need not be excessive, whilst the gain to the student all through was immense. He ventured to think that principals who were willing thus to allow time would find that their apprentices were practically advancing more rapidly and becoming of more real use to them that would otherwise be possible. He concluded by thanking the local society for the courtesy it had shown in inviting him to be present.

Mr. ELLINOR proposed a vote of thanks to Mr. Carteighe for having attended and distributed the prizes.

Mr. PRESTON seconded the motion, and referred with satisfaction to the voluntary help which was given to the school by local pharmacists. He suggested that the Pharmaceutical Society of Great Britain should offer grants to associates somewhat in the same way as South Kensington did for successes in science and art. He further suggested that the Society should not pluck a man in his examination merely because he had failed in one subject.

Mr. CARTEIGHE, in acknowledging the vote, said the President of the Pharmaceutical Society always had received, and he believed always would receive, a hearty welcome amongst his provincial brethren. It had been so from the days of Jacob Bell, and even from those of William Allen. With regard to visiting provincial associations, there could be no doubt that it would be an exceedingly good thing if the President of the Pharmaceutical Society could be present at every meeting of this kind throughout the country. There was one objection to such a course, and that was from the point of view of the holder of the office. There was such a mass of detail work to be got through in London that practically there was very little time left for the President to travel in the country. The Presidents of the Society had to be chosen from the workers in pharmacy as the presidents of most of the local societies were; and during one part of the year they had to devote themselves to a process which he might describe as that of making bread and butter. (Laughter.) More provincial towns might in the past have been visited if there had been a direct intimation that the presence of the President would be welcomed. Presidents liked to come to meetings of this kind. One of the objects for which the Pharmaceutical Society was founded was the promotion of education, and the President would always be glad to visit towns where education had been satisfactorily carried on. As to Mr. Preston's suggestions, he would probably accept the invitation which he (the President) now made, namely, that he would put them on paper. He (the speaker) would submit them in due course to the authorities for consideration. (Applause.) As to Mr. Preston's suggestions as to the grants, he might perhaps say something now, but before doing so he should like to say that many of his colleagues on the Council were anxious to assist provincial education; at the same time they did

not want to appear to do anything which would savour of patronage to or pauperism of the student. Students, he thought, would prefer to bear a certain amount of the expense which was necessary to be incurred in getting their knowledge. It was right that they should pay it; it was right that they should be independent. What the Society had endeavoured as far as possible to do was to assist provincial education in centres like Sheffield by, as it were, helping to provide the machinery and books, just as in the Pharmaceutical Society they helped to provide the room, the apparatus, and all the rest of it—the foundation, in fact. So it often happened that their grants had gone in starting museums, buying cases and things of that sort, helping with a capital sum the little capital sum which was raised by local effort. The fees paid by students here were extremely small. He assured them that, from a long experience of the Examination Board, and from personal communications with candidates, he found that the amount of money that was paid in fees after the age of twenty-one by men who had been apprenticed in provincial towns, in order to become qualified, was immeasurably greater than most people would suppose. Therefore, if they should place before apprentices in Sheffield—even at a considerably higher fee—a sound education, they would be giving them a thing which they would have to pay ten times as much for if they put off their work and came up to London after they were twenty-one. (Applause.) Therefore, while expressing on the one hand his desire, as representing the Pharmaceutical Society, to help forward provincial education in every way, he could not help thinking on the other that they were providing that education almost too cheaply. It would scarcely be possible for them to keep on for any number of years at such a low rate. He would remind the students that, if they did not take advantage of the opportunities which Sheffield now placed before them, they could not hope when they came to London to deceive the Board of Examiners; they might have to pay a very big fee, and several fees, for re-examination. A student had to do three things. He had to learn what was called the mechanical part of his craft, he had to get a certain elementary knowledge of the sciences on which pharmacy was based, and he had to pass his examinations and pay for everything that was done. He ventured to think that in most cases the student was not sufficiently educated at the present time, and that he ought to pay, and pay freely, for a good education. This matter of getting a good education during apprenticeship was at the root of the whole question of examinations. The majority of the men who went up to the Boards of Examiners in London and Edinburgh and failed were men who neglected their apprenticeship studies. They could not pick up elementary chemistry at twenty-one, and at the same time prepare for the Preliminary with any great advantage. At twenty-one a young man was expected to earn his own living. At present there was a lamentable number of rejections, and it was very often the painful duty of the chairman of the Board of Examiners to listen to the appeals of men who were rejected. Practically the reason for failure in the majority of cases was that the period of apprenticeship had not been utilised as it should have been. With regard to the question of the rejection of men who failed in one subject, he assured Mr. Preston that it had been discussed and carefully thought out for the last sixteen or seventeen years. It had been considered by the Scotch Board and the Board in London in all its aspects, and the conclusion which they came to was that it was easier for a candidate to pass in more than one subject—he would not say in all—than to come up in one single subject. If a man got through in four subjects and failed in the fifth, he would be allowed, according to Mr. Preston's suggestion, to come up for the fifth at a subsequent period. That course was pursued for a short time, and it was found necessary to fix a standard of competency. In fixing that standard it was found that men who had been previously rejected seldom got high enough to get the standard number of marks in a single subject. But when they had other subjects they were helped over the stile, and were thus able to obtain their certificates. He was satisfied that on the whole the present regulation was best for the candidates themselves. Whether it was not a little hard to examine a man in six subjects in one day was, of course, another question. He must say that personally he thought it rather hard. He had also heard a complaint that candi-

dates should not be kept too long in London, as it was very expensive. (Laughter.) His answer to that was that if a candidate felt pretty certain he would get his certificate he would not mind staying in London for a week. He did not think he would object to pay more than he did now if he were sure of passing. He hoped, however, that before long that matter would be dealt with. As some of them knew, the Council of the Society had suggested a scheme whereby the examination should be divided, with the object that a candidate should not be compelled to be examined in the whole of six subjects at once. But their impression as examiners was that, on the whole, the present system was better for the candidates than what was suggested for its amelioration. (Applause.)

DINNER.

At the conclusion of these proceedings the ladies departed, and the gentlemen adjourned to the dining-room, where dinner was served. Mr. Furness occupied the chair, and was supported on the right by Mr. Carteighe, Mr. A. H. Allen, and Mr. Newsholme; on the left by Dr. Symes, Mr. Bengier, and Mr. Cubley. Messrs. Bradwell and Fox acted as vice-presidents. After the loyal toasts and a song from Mr. Dobb, jun.,

Mr. CUBLEY rose to propose "Prosperity to the Pharmaceutical Society of Great Britain." In doing this, he claimed that the Society had not only performed great things in advancing the education of chemists and druggists, but had helped to unite the trade, as far as that was possible, by getting members of the calling to join the Society. He saw a great future for the Society if they succeeded in getting everyone in the trade to join it, and if everyone who paid the guinea got all the privileges of members. On this latter point he thought that the present practice of the Society was contrary to equity.

Before Mr. Carteighe replied, the Chairman gave those present an opportunity "to say something in support of Mr. Cubley's remarks," and Mr. Preston availed himself of it by asking what was to become of the Pharmacy Bill. Mr. Senior followed with a song.

Mr. CARTEIGHE, in responding, said that he was pleased to know that at the meeting every grade of the craft was represented, whether apprentice or principal. It was a good thing for all to associate together in this way. He remembered how successful such meetings were in Edinburgh during John Mackay's lifetime. Referring to the remarks of Mr. Cubley, he said that the constitution of the Pharmaceutical Society gave them certain powers, and beyond them they could not go. The powers for combating the evils which afflicted the craft were not so great as was generally supposed. There were a large number of chemists and druggists who did not belong to the Pharmaceutical Society who imagined that these powers enabled the Society to prevent the sale of drugs by unqualified persons. That was quite erroneous. All the power that the Society had was to prevent individuals—not corporations—from selling statutory poisons, and to prosecute unqualified individuals who sell such poisons. He explained which are poisons and which are not, and remarked that he was inundated with letters, mostly anonymous, regarding the sale of other articles, in the true sense of the word poisonous, by unqualified persons, and asking why the Pharmaceutical Society did not put a stop to it. It could not, because it had not the power. They should remember that the powers were for the protection of the public, not of chemists and druggists, and it was very doubtful if the legislature would give protection to the trade. He attributed the reason of British pharmacy being so far behind other countries, and the source of the grievous competition in the trade, to the opposition which first sprang up against the Pharmaceutical Society twenty-five or thirty years ago, when the first Pharmacy Bill was drafted, and also in 1866-67, when another Bill dealing with the whole trade, and placing the dispensing of medicines in the hands of qualified persons, was framed by the Pharmaceutical Society. Then the Society suffered from various evils. Their number was not great, so that they were said not to represent the whole trade, and the outsiders threatened opposition to the Bill if provision was not made to allow everyone actually in business to become members of the Society if they so desired. In the 1852 Bill Jacob Bell sought to make all who passed the examinations members

of the Society, but he had to be content with an Act dealing with titles only. There was opposition at that time, and in 1866, when George Webb Sandford induced the Government to take up a Bill dealing with titles, education, examinations, and the dispensing of medicines and sale of poisons, a body of chemists again arose, and said, "No, we don't want this Bill; all we require is an Act to regulate the sale of poisons." Their opponents introduced such a Bill, and the result was that the minister who had the Pharmaceutical Society's Bill in his charge saw that the trade was divided, referred both Bills to a select committee, and from the committee came the Pharmacy Act of 1868, which was by no means the work of the Pharmaceutical Society, so that no one should blame the Society for the evil which had resulted from the enactment of an emasculated measure. After referring to the desirability of having every chemist and druggist a member of the Pharmaceutical Society, and the attempts which had been made to get such a scheme made compulsory, he remarked that it was a pet one of his own, and he thought that it could be carried out by making the examination and registration fee sufficient to cover the cost of membership. It would be a grand thing for the Society if that could be done. Some people said the present fees were too high, and that the Society derived profit from the examinations. That was not the case; the Society made no profit out of the examinations, which were conducted cheaply because they were dovetailed with the work of the Society. Apart from that, the fees were much lower than those of other examining bodies, and if at any time the Council came forward with a proposition to raise them, their constituents would have to support them. After referring again to the advantages of being connected with the Pharmaceutical Society, the speaker diverged to the question of education, saying that on this subject he was not speaking to the gods. Education would tend to raise the chemist and druggist in the respect of every individual, and that respect would enable him to oppose the stores in the best way. So it had been with the medical profession—before 1816 it was not a highly respected body, but since then through the education which was then inaugurated and in the course of time they had been raised high in public estimation. The Pharmaceutical Council was aiming at the same thing in the Bill which had lately been before the legislature, and the Sheffield School of Pharmacy was anticipating the provisions of that Bill. It was only by steady work at such schools as that, that men could command success. The man who got through his examination by cram did not expect respect, and did not get it. (Hear, hear.) As to the Pharmacy Bill, the Council would in due course consider what should be done. But if the trade was apathetic, said the Bill was not wanted, and got members to oppose it, what could they expect him to do for them in the lobby of the House of Commons? The drug trade, he maintained, opposed the Pharmaceutical Society, and until there was greater union, more loyalty to the Pharmaceutical Council—and such as existed in the humblest trades-union, viz., loyalty to the executive—there would be no advance towards the improvements that they all wished in the trade. He hoped that that meeting would bear good results. (Applause.)

The next toast, "The Sheffield Pharmaceutical and Chemical Society," was given by Dr. SYMES, who said that there are two ways of establishing local schools—one in which a number of local pharmacists, with the desire of helping on their assistants and getting them improved in their work, equipped a school in every respect, and then tried to get the young men to join it. That was the wrong way, and such schools always came to grief. The other and the correct way was what he noticed had taken place in Sheffield. The young men desired to improve themselves, joined together and sought for assistance. In that way the education obtained was thorough, solid, and the young man who came under its benefits looked not merely to the examinations but further on in life. After examination he had to live, had to make the public feel that he was an educated man. Legislation could take them no farther than examination; it would not look after a man's business. (Hear, hear, and laughter.) Speaking of the local society, he expressed his pleasure to hear that it comprised 75 per cent. of local chemists—the *élite* as well as the general dealers of the trade. He was sure that in the long run it would have its influence with the medical men of the district. With the toast he coupled the

name of Mr. Bradwell, Vice-President, who had worked so hard for the society as secretary, that now two men were required to do the work. (Applause.)

Mr. BRADWELL suitably replied, referring to the work which the society and its predecessors had done for pharmacy in Sheffield.

Mr. WARD then proposed "Kindred Associations and the Pharmaceutical Conference." He appealed for more help to local associations from the Pharmaceutical Society in the promotion of provincial education, and in referring to Mr. Carteighe and he were together in Sheffield as secretaries to the Conference. Now they were there as presidents of the principal pharmaceutical bodies. (Applause.)

Mr. BENDER, in replying, claimed for the Conference that during its twenty-five years' existence it had added immensely to pharmaceutical knowledge by the five hundred papers which had been read at its meetings, and other work which it had done for the promotion of true pharmacy.

Mr. CARTEIGHE then submitted "The Sheffield School of Pharmacy" in suitable terms, to which Mr. GRIERSON responded.

Mr. FOX proposed "The Visitors," and to this Mr. RADLEY and Mr. A. H. ALLEN replied.

There was a long musical programme, but with the exception of the items mentioned, and a song from Mr. Piggot, it had to be set aside so as to allow more time for speeches. The company broke up at 12.30, everyone apparently satisfied, and all conscious that the meeting had been the most successful in the history of the society.

BANKRUPTCY REPORTS.

The late ALFRED WOODLIFFE, Bridlington, Chemist and Druggist.

THE debtor has died since the commencement of these proceedings. The Official Receiver reports that since the filing of the petition he has been too ill to allow of his being privately examined by him, or to complete his statement. The particulars given have been prepared by his solicitor from such information as he has been able under the circumstances to procure, but is only an approximate estimate of the bankrupt's assets and liabilities. This statement shows debts due to unsecured creditors, 325*l.*, besides 23*l.* for preferential claims for wages, rent, &c. The assets consist of stock and fixtures estimated at 80*l.*, furniture 80*l.*, and book debts 240*l.* The debtor died on September 25. At a meeting of creditors held on October 4 Mr. Francis Creaser, 93 High Street, Bridlington, was appointed trustee.

T. H. WILLIAMS, Yalding.

ON Friday, at the Maidstone County Court, Thomas Henry Williams, chemist, of Yalding, applied to the court to administer his affairs, he having become insolvent. The applicant said his debts amounted to 45*l.* 15*s.* 7*d.* He could not offer more than 10*s.* a month. The Judge: I cannot make an order with so small an offer. The result would be that it would take a hundred months, about eight years, to pay off the debt. The debtor said he was afraid that he could not keep up payment of a larger amount. His business was very bad, and he had not been able to get a proper stock. He took about 2*l.* 10*s.* a week, and about half of that was profit. The Judge: If you like to make an offer of 1*l.* a month I will make the order. The debtor said he had a family of five children to keep. The Judge remarked that the new rules had not come out, or that would limit the time over which the payment might extend to five years. The debtor then consented to an order of 1*l.* a month.

MORE PEPPER ADULTERATION.—Among the various modes of pepper adulteration which have recently come before the public one of the commonest is the admixture of artificially rounded and coloured earth or stones to the berries, a mode of sophistication which can be practised with white as well as with black pepper. Parcels of pepper thus adulterated have, it is alleged, been repeatedly sold by public auction lately, at a price so low as to render the *bona fides* of the buyers extremely doubtful.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

OPIUM IN TONQUIN.—From official reports it appears that the lower duty of 23*f.* 40*c.*, instead of 65*f.* per ball, has resulted in a revenue of 57,852*f.* a month—a net increase of 153 per cent. on the amount previously collected. Another effect of the measure has been to reduce smuggling to a minimum. Most of the opium imported comes from British India and the Yunnan. The second is much inferior, but as it is cheaper it finds a number of customers among the poorer classes.

INTERESTING TO ABSINTHE-DRINKERS.—The commission now investigating the sale of alcoholic liquors have examined the quality and effects of the absinthe commonly sold. They find that if the oil of wormwood entering into the composition is far from harmless, it should not be blamed for all the evil effects resulting from its abuse. The spirits employed consist frequently, if not always, for cheap grades, of the tailings of alcohol rectification, which contain all the dangerous higher alcohols, including the deadly furfural. The powerful flavour of wormwood and anise seed readily hides the impurities, which have, besides, for the maker the advantage of increasing the milkiness so appreciated by absinthe-drinkers when they mix it with water.

CHANGES IN THE PARIS COLLEGE BUILDING.—During vacation masons have been at work making several alterations and improvements. A very useful one is in the secretary's office, which has been considerably enlarged to the great future convenience of students. At certain times there is a great rush for matriculating or taking out inscriptions, and formerly long lines of young men were standing out in the cold, with only shelter enough to keep off the rain. Now, it is hoped, there will be room for all indoors. M. Planchon, always attentive to the comfort of the students, has given up a good half of his private office to make the improvement. The director is also making preparations to move into the apartments provided for the official head of the college. They consist of a splendid suite of rooms, with twelve windows, on the Avenue de l'Observatoire, which have remained vacant since M. Chatin's departure last year.

VACATION COMING TO AN END.—Various notices just posted on the bulletin board indicate that the Paris College is making ready for work in earnest. Young men wishing to matriculate are notified that preliminary examinations will begin on November 3, at 8.30 A.M. Inscriptions for the first quarter may be taken out between October 25 and November 10. Supplementary semi-yearly examinations will be held from November 3 at 8.30 A.M. for the benefit of such students as may have failed at the last regular session, or who may have been unable to present themselves in August for good and sufficient reasons. Final examinations, preceding the granting of the diploma, will begin on November 7. Other particulars are given respecting the payment of fees, now increased, and the various papers to be produced, for France is essentially the country of papers.

THE NEW READING-ROOM OF THE FACULTY OF MEDICINE is approaching completion rather slowly, owing to lack of funds. It is on the first floor of the new building facing the Boulevard St. Germain, and consists of a hall 90 metres long, 12 metres wide, and 10 high (300 feet by 40 and 33), without a single column or pillar. The light is supplied by some fifteen large windows, and therein lies a great cause of complaint on the part of the librarians. The windows draw an excellent light from the boulevard, but as they are all on one side, and placed very high up, a good part of the reading-room will remain in semi-obscurity. The architects, according to the librarians, have sacrificed everything to external effect, and at some time it will be necessary to open skylights, whether they are ornamental or not, on the roof. There will be, besides, it appears, danger of fire from the offices to be established below, whereby the unique collection of books may be destroyed. It will be seen that the art of grumbling is understood outside of England. At present the reading-hall stands with bare walls, floors littered with mortar, and windows covered with plaster-dust.

Trade Notes.

MR. JOSÉ BOWRON has removed his business in Spanish drugs and other produce from Murcia, in Spain, to 28 Rue de l'Ecliquier, Paris, at which latter address he will also open a commission business in British articles.

MESSRS. S. CLARKE & CO., patentees of the patent "Syphon" gas-condensing stoves, have taken and now occupy new premises, the "Syphon" Works, Park Street, Islington, N.

MR. FRANCIS ARTHUR DARTON has admitted Mr. F. G. Phillips to the firm of F. Darton & Co., wholesale opticians, 45 St. John Street, West Smithfield, E.C., for which Mr. Phillips has many years acted as manager. There will be no alteration in the style of the firm.

THE LIVERPOOL VINEGAR COMPANY (LIMITED).—The second annual meeting of shareholders in this company was held on Saturday at the registered offices of the company, Henry Street. The company was formed in September of last year, and commenced operations in June. Since the end of that month until September 30 the profits have amounted to 30 per cent. per annum. A dividend at the rate of 10 per cent. per annum for three months was declared, and the rest was voted to the reserve fund and for preliminary expenses.

B.P.C. FORMULARY.—Messrs. Wyleys & Co. have issued as a supplement to their September price-list a four-page sheet entitled "Notes on the Unofficial Formulary." They point out that the formula for inj. curare hypoderm. is that proposed by Mr. John Moss; that the Farrish's syrup contains only $\frac{1}{2}$ grain of calcium phosphate; that the formula given for Easton's syrup contains only $\frac{1}{4}$ grain of phosphate of quinine in the drachm, and they announce that they shall continue, for the present, to supply their ordinary syrup, guaranteed to contain 1 grain per drachm, unless the B.P.C. syrup is specially ordered. Other comments of a similar nature are given, and the prices of the preparations have also crept in.

Personalities.

MR. J. G. CHAPMAN has purchased the business of Mr. Lowe, 6 Chapel Street, Lynn.

MR. ATTFIELD, from Messrs. Corby & Co., London, is about to commence business at Dartmouth.

TWO LADY PHARMACISTS, named Stammwitz and Neve, have commenced business at 2 Palace Avenue, Paignton.

MR. W. E. EVERITT has purchased from the executors the business lately carried on by Mr. Frederic Cole, 33 and 34 St. Botolph Street, Colchester.

MESSRS. GUYER & SHAPLEY, Medical Hall, Torquay, are about to open a branch establishment near Wellswood, Torquay.

MR. HEARDER, having retired from the firm of Hearder & Riches, chemists, Torquay, the business will be carried on under the style of "Riches & Tomlin."

THE business carried on by Mr. A. G. Clark, at 89 Gilmore Place, Edinburgh, has been purchased by Mr. Thomas J. Selby, who was at one time with Mr. J. C. Pottage, Prince's Street. Mr. Clark retires on account of ill-health.

MR. JOSEPH PHILLIPS MALLIN has purchased the business of the late Mr. Thomas Dodson Walker, Post-office, Dresden, Staffordshire. Mr. Thomas Tomlinson, Manchester, was valuer, ne vendor, and Messrs. Wyleys, Coventry, for the purchaser.

MR. CYRIL D. MARSON obtained a medal and first-class certificate of honour for practical chemistry, and a medal and first-class certificate for materia medica, at the recent sessional examinations at Queen's College, Birmingham. Mr. Marson has twice taken first prizes in our Corner for Students.

THE old-established business of Mr. Henry Gill, Sheffield, has undergone a change, the trade being carried on as "Messrs. Henry Gill, Bennett & Co.," Mr. Bennett having previously travelled for Messrs. B. Newham & Co., of that town. Messrs. Thomas Tomlinson & Son were the negotiators and valuers.

THE business of the late Mr. John Bickell, wholesale druggist, Ashton-under-Lyne, has been sold, on the inventory and valuation of Messrs. Thomas Tomlinson & Son, Manchester, to Messrs. Spybey & Preston, who will carry on the business as usual in the name of John Bickell & Co. Mr. Spybey has represented Mr. Bickell for some years.

MR. H. H. BARNETT, late of Auckland, N.Z., whose name has been mentioned of late in connection with the perfumery receipt book of Messrs. Piesse & Lubin, is now in England, and called at our office this week. Mr. Barnett, who is very respectably connected in this country, indignantly repudiates the statement which has been published that he has ever kept out of the way of the parties in New Zealand with whom circumstances brought him into collision. He states that he is not now, and has never been, attempting to elude them, and hints that the whole of the romance of the lost formulary has yet to be told.

Obituary.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

EDWARDS.—On September 14, at his residence, Walker Street, Wellington, Salop, William Edwards, chemist and druggist, formerly of the firm of Edwards & Stutchbury, city of Georgetown, Demarara. Aged 74.

LATHBURY.—On October 6, at his residence, Stoneycroft, near Liverpool, Mr. Robert Lathbury, formerly chemist and druggist, Castle Street, Liverpool. Aged 82. The business of which Mr. Lathbury was the principal was established by his father, and was carried on by father and son for over 100 years. A few years ago it was taken over by Messrs. Clay & Abraham, who carry it on as a sort of "city branch." When the father of the deceased was in business there were only three other chemists in Liverpool, namely—Mr. Johnson, in Church Street; Messrs. Edwards & Penny; and Mr. Oakes, Pool Lane, now South Castle Street. The late Mr. Lathbury was a staunch Tory of the old school. His shop in Castle Street was for many years the rendezvous of well-known local public men, where they indulged in friendly gossip. Mr. Lathbury possessed a fund of local information, and his dry humour and racy anecdotes made his company always acceptable. Twenty years ago his stalwart figure and fine presence were familiar in the thoroughfares of the city. For many years he engaged zealously and disinterestedly in the work of rescuing dumb animals from cruel treatment, and became known in Liverpool as the "champion of animals." He was appointed honorary secretary to the Society for the Prevention of Cruelty to Animals, and to his untiring energy the success of this institution is in no small measure due. In early life Mr. Lathbury was distinguished for his strength and ability as an athlete. In his later days his courage and prowess did not forsake him. On more than one occasion, when some burly carter was cruelly flogging his horse, he would be surprised to find himself in the grip of the "animals' champion," who would retain his hold of the offender with the tenacity of a bulldog until police assistance arrived. In his capacity as secretary of the Royal Society for the Prevention of Cruelty to Animals he had often to appear in court in support of the charges of cruelty to animals, and his kindness, fairness, and straightforward conduct gained for him the esteem of the local justices. He retired from business and resigned his position as secretary of the Royal Society for the Prevention of Cruelty to Animals in 1875, but remained on the committee. On retiring from the secretaryship he was presented by the parent society in London with their grand diploma in honourable recognition of his services, and by his local admirers with an annuity of 70l. per annum, purchased for himself and his wife.

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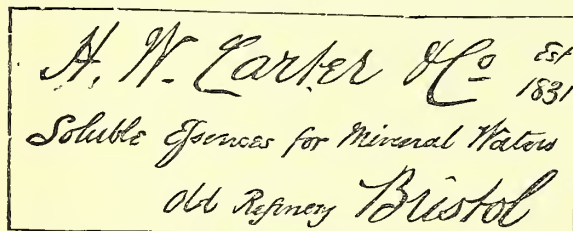
IMPORTANT NOTICE.

By reason of an improved method of caption, by which dilution is avoided, **FRIEDRICHSHALL WATER** will be found now to be of **CONSIDERABLY GREATER STRENGTH AND EFFICACY** than heretofore.

The ordinary dose is a large wineglassful (4 ounces) taken fasting. Most efficacious and more acceptable to the palate when heated or mixed with an equal quantity of very hot water.

"The most suitable aperient for prolonged use."
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SEE SEABURY & JOHNSON'S Advertisement of **INDIA-RUBBER POROUS AND SPREAD PLASTERS** on page 49.

SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.

SEE ADVERTISEMENT, PAGE 17.

WOODHALL SPA BROMO IODINE MINERAL WATER.

The strongest known Iodine Water in the World.

This remarkable Spa has been purchased by a Syndicate of gentlemen who have determined to make more widely known the extraordinary curative powers of this spring, which contains more Iodine and Bromine than any spring in Europe—"And, we may safely add, in any part of the World."—*Dr. Cuffe, for many years late resident Physician at Woodhall Spa.*

An analysis of the water having been made in November, 1886, by Professor Wanklyn, M.R.C.S., corresponding member of the Royal Bavarian Academy of Sciences, Professor of Chemistry, a very important discovery has been made, viz., the presence of Free or Elementary Iodine.

Dr. Wanklyn says—"So far as I am aware, this is the first instance in which free Iodine has been found in appreciable quantity in a natural water. For many years the Woodhall Spa has been celebrated as a valuable remedy in skin diseases. The fact that it is a solution of free Iodine is interesting in this connection, and well worthy of the attention of the medical profession."

The Woodhall Bromo Iodine Water is now being bottled at the Spring by the Sole Agents, **BROMLEY & CO.,** Chemists, 233 High Street, Lincoln, 5 & 6 The Grove, Buxton, and at Woodhall. All communications to be addressed to them at the Spa, Woodhall Newcastle.



EDITORIAL NOTES.

THE UNOFFICIAL FORMULARY.

II.—GALENICAL PREPARATIONS.

RESUMING our comments on the Unofficial Formulary, the items which now fall to be noticed are those which include little or no chemical reaction in their preparation. Taking these in their order, *Elixir cascara sagrada* is the first which may be noticed. This is made from the official liquid extract two volumes of which are diluted with three volumes of corrigents. The preparation begins to deposit very quickly, and in a few days this deposit assumes considerable proportions. This is a fatal objection to the elixir, but should there be any pharmacists who do not object to a muddy preparation, they may be those who are fastidious about internal remedies not having the odour of applications for the hair—the odour of the elixir closely resembles that of some cheap pomades. The deposit is prevented, and the odour and taste of the elixir greatly improved by omitting the rectified spirit and cinnamon water, replacing them with 4 oz. of tincture of cinnamon. Or a compromise may be adopted by doubling the amount of rectified spirit and using 2 oz. of cinnamon water. The bitter taste of cascara sagrada is not extinguished in the elixir. The *Elixir guarana* is in some respects a model formula. The preliminary treatment of the drug with calcined magnesia and proof spirit liberates the alkaloid from its combined tannic acid, thus ensuring practical exhaustion of the drug as well as the permanency of the elixir. After this treatment the moist powders are mixed with sand and packed in a percolator. It is as well to mention that this operation is not free from danger. Sand has the property, when moist, of splitting glass vessels, and if a cylindrical percolator, which will allow a proper depth of marc relative to the diameter (that is, about four to one) be used, the destruction of the percolator may be looked for, especially if the guarana and sand mixture is packed with a little force. A distinctly conical percolator, such as figs. 117-122 in our last DIARY, should be used. But it would serve the purpose equally well to macerate the guarana for a week in a pint of proof spirit, then filter and press the marc in order to recover the residual tincture. The tincture is of the colour of tincture of gentian, and has a very pleasant odour, which is not improved by the addition of cinnamon. It is a remarkable circumstance, and an objectionable feature of the Formulary, that cinnamon enters into all the flavoured preparations, yet cinnamon is an abhorrent flavour to a large number of patients. We find it also in the *Elixir simplex*, whereby a

good and official American preparation has been spoiled. *Elixir simplex* is the name under which the elixir of orange, U.S.P., has been universally known; in the interests of uniformity it would have been more satisfactory to have adopted the U.S.P. formula as it stands, and not have tinkered it past recognition. The formula which has been adopted for *Emulsio olei morrhue* is taken from Mr. Bailey's "Physician's Pharmacopœia." It will be remembered that a discussion on the practicability of the formula took place in this journal six months ago, and opinion upon it was divided. It undoubtedly presents difficulties, the principal one of which is that on mixing the mixture of tragacanth, tincture of benzoin, and spirit of chloroform with the oil, the gum is apt to separate in gelatinous lumps on the addition of water, and then it is not possible to secure success. This tendency is obviated by adding two or three ounces of rectified spirit to the gum mixture, and this addition ensures a better emulsion. As it stands the formula gives only a mixture, not an emulsion; the oil exists in large globules, which are visible to the naked eye. A superior emulsion is obtained by the process recommended by Mr. William Gilmour in a paper communicated to the North British Branch of the Pharmaceutical Society some years ago. The liquid extracts of the Formulary are U.S.P. preparations, the extract of Grindelia being the only one which has undergone modification, and that only to the extent of omitting a little water.

The formula for *Linimentum opii ammoniatum* is novel. This liniment, which is an imitation of the celebrated Dr. Bow's article, is generally made in the North by digesting 2½ oz. of opium and 1½ oz. of hard soap in a pint of compound camphor liniment. The Formulary preparation is only about a fifth of that opium strength, and is paler in colour than the original Bow's. Mr. William Duncan conclusively proved (THE CHEMIST AND DRUGGIST, vol. xxviii. page 291) that a comparatively small percentage of morphia exists in the liniment as generally made, and suggested that the formula should be remodelled. Emendation was required in the direction of a decrease of opium, because the ammoniacal menstruum throws morphia out of solution; in this respect, therefore, the B.P.C. formula is an improvement, but it also deposits slightly on standing. This may be avoided, and the colour of the liniment at the same time improved, by digesting the solid ingredients of the liniment in the menstruum for seven days. If methylated soap and belladonna liniments are used, the odour of the liniment more closely approximates to Bow's than when rectified spirit alone is employed. In THE CHEMISTS' AND DRUGGISTS' DIARY (1881) the suggestion was made that the colour of the liniment may be accounted for by the presence in it of extract of belladonna. It has also been stated that caramel is present in the original. The committee, in accepting the belladonna suggestion, have improved the preparation by using the liniment instead of extract. *Syrupus cascara sagrada* is an excellent preparation for children, the liquorice quite covering the bitter taste. It is liable to ferment when kept in a warm place, but this may be prevented by increasing the aromatics as well as the sugar. With the exception of the tinctures of benzoin, bryony, hydrastis, and strophanthus, the formulae for the tinctures have been devised by the members of the committee. The tincture of bryony is made by the homœopathic method, which is much better than the U.S.P. one, in which the dried root is employed. The directions given for preparing the tincture are not so lucid as they might be, and this remark also applies to the directions for most of the tinctures, especially convallaria, ergot, casca, eucalyptus, euphorbia pilulifera, hamamelis, hydrastis, and quillaia. In none of these is there provision for economising men-

struum, or for recovering it by pressure or displacement. Probably the committee's intention was to pay a compliment to the technical skill of their professional confrères, but it would have been better to have sacrificed compliments for precision. In the case of *Tinctura ergotæ ammoniata*, for example, from 6 to 10 oz. of menstruum are left in the marc after the pint of tincture has percolated, and as the last few ounces of percolate are of a pale colour, it would be an improvement to collect only 15 oz. of percolate, then press the marc, filter the expressed liquor, and mix with the percolate. Displacement of the spirit with water is in this case unsatisfactory. The tinctures as a class are the most workable preparations of the Formulary, and do not call for special comment.

In the second edition of the Formulary the committee have made a few verbal alterations which should be noted. Under *Syrupus Calcii, Manganesii, et Potassii Hypophosphitis* (a dreadful name for a prescriber to write), the directions are: "Rub [the salts and water] together in a hot mortar till nearly the whole is dissolved, and add syrup sufficient to produce 1 pint. Filter or decant." Under *Syrupus Ferri Hypophosphitis* it is directed to "wash the precipitate with distilled water sufficient to produce 1 pint of syrup." The italicised words in both cases are new. The title of Tincture of Euphorbia has been changed to *Tinctura Euphorbiæ Pilulifera*. The first title was unhappy, for it was too like *Tinctura Euphorbiæ*, a preparation which is still in use to some extent, and which is therapeutically different from the tincture of the Antipodean plant.

It is evident from what has been said in this and preceding notes that improvement in many of the Formulary preparations is desirable, and the committee should carefully revise their work before next year. In this every chemist and druggist who makes the B.P.C. preparations can aid the committee by communicating results, whether they are satisfactory or not. We shall gladly give publicity to any communications of that nature which we may receive.

THE PHARMACEUTICAL SOCIETY'S FINANCES.

WITH something closely approximating to righteous indignation Mr. Atkins at the Pharmaceutical Council table last week protested against the supposition that the motion to go into committee to consider a matter arising from the financial report was due to a desire to hide anything from the members of the Society; the President also declared that he did not care whether the matter was discussed openly or not. Of course there is "nothing to hide"—what can there be? Even the bitterest critics of the Council proceedings do not suppose that they pool and divide the month's income those times when reporters are requested to leave the Council chamber while matters of finance are being considered. "Nothing to hide"—no; but officialism cannot help hiding. Secretiveness follows it as certainly as flies follow sugar. No doubt our rulers most honestly think that it is for the good of the Society that the way the money goes should be wrapped in as much mystery as can be conveniently adopted, and Mr. Evans, the new member who cannot quite get into that way of seeing things, is coming to be regarded as a rather uncomfortable acquisition by his more experienced colleagues. This inclination to suppress financial details is manifest in the careful editing of the official reports, as well as in the preference for secret over open discussions in the Council. A comparison of the reports in THE CHEMIST AND DRUGGIST for the past three months with those in the *Pharmaceutical Journal* will suffice to prove this. The official

report of finance matters which came up at the July meeting is confined to statements that 1,000*l.* would be set aside for the building contractors, and that 3,000*l.* of new Three per Cents. should be sold. At the meeting there was some conversation as to the amount which had been paid to the contractor. Mr. Evans unsuccessfully tried to get a definite idea regarding the probable cost of the building scheme. These incidents were duly reported in *THE CHEMIST AND DRUGGIST*, but did not appear in the Council's own report. In August the details regarding building matters were again cut short in the official report, and in stating that the expense in carrying out prosecutions was less than usual the important fact that the cost of the Leith Depôt case was not included was omitted. Before the finance report was adopted on this occasion Mr. Evans raised the question of furnishing each member of the Council with a copy of the monthly statement, and a long discussion followed, during which he and older members of the Council expressed their astonishment that the charges for painting were so high. The tone of this discussion, as reported in *THE CHEMIST AND DRUGGIST*, showed conclusively that some members of the Council were poorly informed as to financial details, and that they wished to be put in a better position regarding them. The whole discussion was decidedly disquieting, yet the official report of it, in which specific sums are classed as "details," conveyed only a vague idea of its true character. The discussion at last week's meeting of the Council was calculated to make the friends of the Society more serious than ever. The building scheme is still in its infancy, the examination hall, which is approaching completion, being but a small part of it. Yet it has already absorbed a large part of the floating cash balance, together with 3,000*l.* worth of Three per Cents. (sold in July); and last week a resolution was agreed to for the sale of another 3,000*l.* of Three per Cents. A motion for power to affix the seal of the Society to the power of attorney necessary for the sale of the stocks followed. And yet the only record of these transactions published officially is that "the report of this Committee [Finance] included a recommendation authorising the payment of a further sum not exceeding 1,000*l.* to the contractors for the new buildings, on the architect's certificates." Other votes, besides the one for 1,000*l.*, were passed when the report was adopted, and as the treasurer had only 900*l.* in hand to meet these demands the vote to sell out the stock was necessary. Of course, as we have already stated, there is "nothing to hide." The Society's thousands are melting away, or, rather, they are solidifying into bricks and mortar, at an alarming rate; but the President is looking after things. Why need gentlemen from Wales, or from any other part of the kingdom, trouble themselves?

IS OUR CHILIAN TRADE DECLINING?

A SOMEWHAT acrimonious controversy has arisen between the British Vice-Consul at Santiago and Mr. Stephen Williamson, M.P. for Kilmarnock, on the subject of the alleged decline of British trade with Chili. The British Vice-Consul at the commencement of the year sent home a detailed review of Chilian trade, in which he lamented the falling off of British imports, and the concurrent increase of German trade with that Republic. The fault was laid principally at the door of our manufacturers and exporters, who were reproached with being not sufficiently active in studying the requirements of the Chilian market, and the outlook was described as gloomy in the extreme for British interests. Mr. Williamson criticised the report somewhat severely in the public press, and his comments were forwarded with

praiseworthy smartness to the Vice-Consul by the Foreign Office with a request for explanation. Mr. Thomas, the Vice-Consul in question, has now sent home a further report, accompanied by a large number of diagrams, by means of which he endeavours to back up his contention, and again Mr. Williamson returns to the charge with a declaration that Mr. Thomas's own diagrams prove the incorrectness of his assertion that our commercial supremacy in Chili is on the way of extinction. A careful study of the documents impounded certainly tends to impress an unbiased investigator with the conviction that Mr. Thomas's statements are of an unwarrantably alarmist character.

The first fact made patent by the diagrams is the enormous variation in the commercial movements of the country. In 1875, the first year covered by Mr. Thomas's figures, an international exhibition was held in Chili, and from that year the value of the imports began to decline rapidly. The tide of depression reached its lowest ebb in 1878 and 1879, when the country was engaged in a life and death struggle with Peru and Bolivia, and rose with an abnormal bound after the termination of that war. In 1883 a downward movement again set in, the natural result of overfeeding the markets in the preceding years, and at the close of 1885, the last year covered by the diagrams, that decline threatened to assume still larger proportions. Now we find that, whereas Great Britain, in the years of prosperity from 1880 to 1883, obtained a lion's share of the increased trade, so in the years of meagreness she suffered more heavily than her principal rivals, Germany, France, and the United States. We still hold, and seem likely to do so in future, as overweening a share of the Chilian import trade as we did ten years ago, and if Germany has advanced during that period at a comparatively much quicker pace than we have done, it is evident that her progress has been accomplished less at our expense than at that of France, and, in certain branches, of the United States. Mr. Thomas selects, apparently at random, thirty-five articles from the various manufactured goods imported into Chili for the purpose of affording, by means of diagrams, ocular demonstration of the alleged decline of British trade. In many of these diagrams this country undoubtedly cuts a sorry figure, but it is remarkable that in the articles representing by far the largest amount of money she triumphantly holds her own. Take, for instance, "assorted goods." In 1875 France headed the imports in this branch with 558,000 pesos, Britain followed with 345,000, and Germany came third with 128,000 pesos. In 1885 the order was still the same: France sending 779,000, Britain 613,000, and Germany 451,000 pesos worth. During these years we managed to considerably lessen the distance between ourselves and France, while Germany has become a competitor which must be seriously reckoned with, but which has still considerable leeway to make up. In hardware the position is similar, but much more favourable to this country, and the same may be said of machinery, another heavy item. The fluctuations in the trade in refined sugar show a relatively better position for Britain than that of France and Germany, although, of course, so far as values are concerned, the bounty-aided Continental sugar has the advantage of ours. In machinery, millwork, and hardware generally we are doing very well indeed, but it must be confessed that the trade in textile fabrics appears to be altogether slipping out of our hands. Of earthenware we still send more than double what is shipped by Germany, but we no longer dominate as unquestioned in this branch as we did ten years ago. In glassware we are being quite supplanted by the Germans, but in the paper trade we are rapidly gaining ground, mostly at the expense of France. As regards drugs and chemicals, we gave in our issue of June 25 of this year a

far more detailed review of our position in 1885 than is contained in Mr. Thomas's report. The figures then adduced by us showed that in such articles as chemicals, drugs, dry-salteries, spices, oils, paints, and perfumery this country still takes the lead. Mr. Thomas, however, gives a diagram relating to "drugs" only, which shows that our trade in that particular department is making steady progress, although Germany has lately been ahead of us. France, it seems, is losing ground fast. The following figures convey an idea of the tendency of the trade in this branch:—

Imports in Pesos		1875	1880	1883	1884	1885
Great Britain .. ..	..	80,000	76,000	91,000	105,000	120,000
France .. ..	..	71,000	46,000	93,000	88,000	59,000
Germany .. ..	..	47,000	64,000	140,000	159,000	150,000
		198,000	186,000	324,000	352,000	329,000
Percentages						
Great Britain .. ..	..	40	41	28	30	36
France .. ..	..	36	25	29	25	18
Germany .. ..	..	24	34	43	45	46

Of course, as compared with the entire import trade of the country, drugs form but a very small item, and can hardly be said to influence the purpose of the diagrams at all. At the same time they show that the German export drug trade has developed, and is still growing, to an extent which must seriously alarm British export druggists, and should be an additional spur to the latter to bestir themselves and regain, as they may do if they try, their lost supremacy in this branch. But while thus much may be admitted, it is equally clear that the progress of Germany has been achieved far more at the cost of the French than of British trade. France, in fact, seems to be in danger of losing her Chilian trade altogether, the United States are making no progress, and the future struggle for supremacy will almost certainly lie between this country and Germany only. That struggle will be a serious one, but we have the advantage of holding by far the larger proportion of the trade, and the assertion that all British imports are losing ground in favour of German goods is clearly erroneous.

THE "SATURDAY REVIEW" ON QUACK MEDICINES.

At one time the *Saturday Review* was understood to be a weekly indulgence of the cream of the cultivated classes. Its readers must be of a much lower level of intellect now if they can obtain any solid instruction from the articles now being published by the venerable reviler on "Quack Medicines." The writer seems to have just discovered that "the Government stamp guarantees nothing except the fact that the duty has been paid." He evidently expects this astonishing circumstance will come as a revelation to his readers, as it probably did not long since to himself, and we must assume that he can estimate the capacity of his *clientèle* better than we can. Having solemnly explained the meaning of the Government stamp, the writer goes on to expound what he knows, and to indicate how much he does not know, about Holloway's pills and ointment in the first article, and about chlorodyne in the second. It would fulfil no purpose to go through the writer's statements in detail, and it is no business of ours to defend patent medicines. But we should have thought that, if it had been considered desirable to attack the patent-medicine trade, the *Saturday Review* would have taken care to present an array of solid facts, rather than an undigested tissue of vague inaccuracies touched up with a somewhat weak attempt at jocularity. Referring, for instance, to Holloway's ointment, we are told that "a little

resin ointment to a sore finger is better than poppy or mandragora, or all the drowsy syrups of the world;" and, further on, that the ointment "may also be used with great advantage for cleaning and preserving saddlery." Are these specimens of the satire which our fathers fancied they found in the *Saturday Review*? Passing, however, such criticisms as these, we find in the second article a statement which, in the interests of its readers, the *Saturday Review* ought really to prominently correct. The writer pretends to know the exact composition of chlorodyne, although he tells us "there are at least three well-known rival varieties." And here, according to him, is "the composition of the nostrum." We give it exactly as it is printed in the *Saturday Review*:—

Six drachms of chloroform.

Half a drachm of tincture of capsicum.

Three minims of oil of peppermint.

Eight grains of morphia (sixty-four doses).

Twelve drops double strength prussic acid.

One drachm of tincture of Indian hemp. (*Bhang*, or Indian hemp, is a poison used throughout the East to produce insensibility. It is the *Benj.* of the *Arabian Nights*.)

One drachm of treacle.

The maximum dose is half a drachm, and a 4s. 6d. bottle would kill at least eight people.

If the ingredients quoted were weighed the bulk would be less than a fluid oz., and only a little over that quantity if measured. The compound would be immiscible, and the morphia strength would be twice that of Martindale's formula, eight times that of the British Pharmacopœia (tinct. chlorof. et morphiæ), and thirty-two times that of Squire. If some of the innocent readers of the *Saturday Review* should set to work to make their own chlorodyne from the formula given them by that authority, it will very soon be seen whose chlorodyne is the most dangerous. We quite agree, and have always urged, that there needs a modification in the law as regards the sale of patent medicines containing poison; but when it is remembered that nearly twenty millions of packets of patent medicines are sold in Great Britain annually, it will occur to any responsible legislator that this trade must fill a real and legitimate demand. And though there may be some abuses connected with it, he will recognise it as his duty rather to correct these than to attack a whole system which is evidently, on the whole, of enormous public usefulness, and is not to be disposed of by a few flippant journalistic criticisms.

Charles Reade, in one of his novels, gives a graphic account of a lucky catch of a quantity of ambergris in the body of a sperm-whale, which was found floating on the ocean "as high as a frigate," dead of disease. David Dodd, the narrator of the story, states how, as his vessel approached the sperm-whale, the stench of the carcass became so intolerable that the skipper gave the crew leave to go below and close the lee ports, only remaining on deck himself with Dodd. They stuffed their noses and ears with cotton steeped in aromatic vinegar, and their mouths with pig-tail; they lighted short pipes, and broached the vessel upon the putrescent monster, and grappled to it. Then the skipper jumped on it, a basket slung to his back, and a rope fast under his shoulders, and drove his whale-spade in behind the whale's side-fin, digging a hole four feet deep. After a long search he gave a shout of triumph, and picked out some stuff that looked like Gloucester cheese, and when he had nearly filled his basket, returned on deck. Soon a heavenly perfume arose from the cheese-like stuff, struggling for mastery with the stench from the carcass. The stuff was ambergris—eight pounds of it—which the captain sold to a wholesale chemist at a guinea an ounce, clearing 128*l.* by the transaction. A few years ago, long after the exploit recounted in Charles Reade's story, a firm of London wholesale druggists actually sold a lump of ambergris, weighing no less than twelve pounds, for which the sum of 800*l.* was paid. This lump was found, strange to

say, in a gravel-pit in New Zealand, and it has generally been considered one of the largest pieces of genuine ambergris ever heard of. But if we are to believe the *Boston Bulletin*, both the New Zealand piece and the basketful collected by Reade's gallant captain are the merest trifles compared to the immense blocks of ambergris sometimes placed on the market in the United States, that classical country of "big things." The largest lump of ambergris known, says our American contemporary, was taken from a sperm-whale caught by the schooner *Watchman*, of Nantucket, in 1853, and weighed 640 lbs. It was sold—we presume *en bloc*—to a Boston firm of perfumers, at what price is not related. Another large piece, the weight of which is given as 560 lbs., is said to have been brought by a whaler to the United States only last August. It is added that the captain of the vessel said that, although he had been whaling for thirty years, and never killed a sperm-whale without looking for ambergris, this was the first he had ever seen. This lot was also sold to a Boston house. A New Bedford whaler is reported to have had the good fortune to find a lump of ambergris weighing 266 lbs. (it is well to be exact) in the body of an unfortunate whale killed by him about five years ago, and pieces weighing over 200 lbs. are said to have been more than once found floating on the Pacific Ocean by American sailors. Somehow the large pieces referred to must have been disposed of very quietly, for no reports of the sale of any such vast quantities have reached our market—indeed, the whole story of the 640-lb. block and its 560-lb. brother seems "very like a whale."

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Medical Plagiarism. Dr. J. M. MacLagan, of Hexham, exposes in the *British Medical Journal* a glaring case of plagiarism on the part of Dr. C. S. Taylor.

This gentleman has been inquiring into the physiological action of colchicum in cases of gout and rheumatism, and a preliminary report from him appeared in the journal named on July 30 last. A month afterwards Dr. MacLagan pointed out that Dr. Taylor's conclusions were exactly the same as those at which he had arrived about forty years ago, and in a second letter he gives a page of quotations from his own papers published in the *Edinburgh Medical Monthly Journal* in 1851-52, and from Dr. Taylor's paper. The extracts are mainly the results of chemical analyses and clinical notes, which the most vivid imagination cannot suppose would be identical in different cases with an interval of nearly forty years between them; yet Dr. Taylor's analyses and notes are not only identical, but the words in which he couches them are exactly the same as Dr. MacLagan's!

* *

Pharmacy in *Extremis*. Two evidences of the struggle for existence among those chemists and druggists who are as yet just above the necessity for charitable assistance came before us this week. One is the report of an application made at the Maidstone County Court for the administration of a chemist's affairs. The chemist in difficulties said he owed 45*l.* 15*s.* 7*d.*; he takes in his shop about 50*s.* a week, "about half of which is profit"; he cannot get a proper stock of drugs, but has five children to keep. Out of his income of 5*l.* a month he is to pay 1*l.* towards the liquidation of his debts. The other instance appears from a letter which has been sent us by a wholesale firm. They had sent out circulars to chemists offering samples of a new line of pharmaceutical preparations. One chemist in the West of England noting this offer wrote for such samples, adding, "Would you kindly send as heavy a sample as you can well spare?" The applicant very frankly stated that he was short of stock, and had a wife and daughters dependent on him. He could produce evidence that he is honest and respectable. In a P.S. he adds, "Would I venture to ask a few aperient pills?"

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Selling Plate. It will be remembered that in the recent Cardiff cases the Board of Inland Revenue claimed that in estimating whether an article might be sold with or without a plate licence, the total weight of the article, and not of the silver or gold attached to it, should be taken. The exact words of the Inland Revenue Act (1867) imposing the licence are as follows:—

"There shall be charged and paid the following excise duties on licences to deal in plate to be taken out yearly in the United Kingdom by the persons hereinafter mentioned; (that is to say) by every person who shall trade in or sell any article composed wholly or in part of gold or silver, in respect of every house, shop, or other place in which his trade or business shall be carried on:—Where the gold shall be above two pennyweights and under two ounces in weight, or the silver above five pennyweights and under thirty ounces in weight, the sum of 2*l.* 6*s.*; where the gold shall be of the weight of two ounces or upwards, or the silver of the weight of thirty ounces or upwards, the sum of 5*l.* 15*s.* (s. 5.) All articles sold or offered for sale . . . and alleged to be composed wholly or in part of gold or silver shall for the purposes of this Act be deemed and taken to be composed of gold and silver respectively *as alleged*; and if upon the hearing of any information for any offence against this Act any question shall arise touching the quantity of gold or silver contained in any article, the proof of such quantity shall lie upon the defendant." In *Young v. Cook* (3 Ex. Div., 101) it was decided that the quantity of the precious metals must be taken to mean the alloyed metal so sold as gold or silver, and that if the weight thereof exceeded the above limits, the Act would apply, and the licence must be taken; and this decision is intelligible, for practically it would be exceedingly difficult to determine in any off-hand manner what might be the precise quantity of the pure metal in an article sold as so many carats fine; and perhaps by a violent strain it might be contended that if an umbrella or a smelling-bottle were sold as solid silver the penalty might be inflicted, however absurd such a contention seems. But if it is sold as a silver-mounted umbrella or smelling-bottle, it seems reasonable that the mount only ought to be taken into consideration; and we should suppose that if a case were fought out on this basis such would be the result.

NEW COMPANIES.

INVENTIONS AND AGENCY COMPANY (LIMITED).—Capital 2,000*l.*, in shares of 1*l.* each. Object, to represent British and American and other foreign manufacturers, inventors, and others; to undertake the sale or hire of goods, specialities, machines, or machinery of every description.

GEORGE NELSON, DALE & Co.—This firm of gelatine manufacturers, Emscote Mills, Warwick, and 14 Dowgate Hill, London, has been registered as a limited liability company, under the style of George Nelson, Dale & Co. (Limited). Capital 300,000*l.*, in 100*l.* shares. There will be no public issue of shares, the whole being taken up by the existing partners. No change will take place in the management of the business. The first directors are G. H. Nelson, E. R. Morris, E. Montague Nelson, and George Nelson. Qualification, the holding by each of at least 1,000*l.* in the capital of the company. G. H. Nelson shall be the first chairman of the board. The remuneration of directors shall be 3,500*l.* per annum, divided amongst them as they themselves may determine.

BLUE STAMPING-POWDER is composed of resin, damar, copal, sandarac, Prussian blue, ultramarine, and bronze powder, equal parts. The resins should be powdered and sifted, and the rest of the ingredients carefully added. Other colours may be made by changing the pigments.

ANHYDROUS LANOLIN should only be used for making lanolin emulsions. It should be rubbed up with half its weight of powdered gum acacia, and when thoroughly mixed water should be added in the usual way for making a fixed oil emulsion.

FILTERING HEAVY OILS.—A correspondent of the *Druggists' Circular* recommends the following method of filtering heavy oils and syrups:—Place a piece of white flannel in the funnel. Wet the flannel well and sprinkle it with powdered French chalk until it is well covered; then place another piece of well-wetted flannel over the first. This makes an excellent filter for the purpose. [After the flannel has been dried, we presume.—ED.]



The following applications for Patents have been registered at the Patent Office.

- Bottle**—13,033.—September 26, 1887.—F. W. Child. A medicine bottle.
- Blue (Laundry)**—12,736.—September 20, 1887.—R. Ashton. Method of preparing blue for laundry use.
- Bronchitis**—12,972.—September 24, 1887.—W. H. Westmacott. An embrocation for the cure of bronchitis, diphtheria, quinsy, and other throat affections, and consumptive cough.
- Cleansing Powder**—13,047.—September 27, 1887.—J. W. Paton. A cleansing powder or compound.
- Condiments**—13,032.—September 26, 1887.—W. M. Clear. Digestive condiments.
- Dental**—11,462.—August 23, 1887.—J. Macdonald. Manufacture of artificial teeth.
- Disinfectants**—12,029.—September 5, 1887.—J. Bennett. A disinfectant.—12,222.—September 9, 1887.—R. V. Tuson. Preparation of materials to be used as disinfectants, parasiticides, &c.—12,483.—September 14, 1887.—J. Bennett. A disinfectant.
- Embalming**—12,769.—September 20, 1887.—J. de Nueda. Preservation or mummification of corpses.
- Feeding Bottles**—11,320.—August 19, 1887.—G. Hartmann. Infants' feeding bottles.—11,343.—August 19, 1887.—E. Woodham and P. Ockenden. Unions for attaching teats to feeding-bottles.—12,342.—September 12, 1887.—J. G. Tongue. Infants' feeding bottles.
- Filtering, &c.**—11,393.—August 20, 1887.—O. Bowen and J. Coheldick. A deodorising, decolorising, and filtering medium.
- Fly Killers**—12,256.—September 9, 1887.—E. F. Wells. A device for killing flies.
- Inhalers**—11,647.—August 27, 1887.—S. F. Smith. A combined respirator and inhaler.—12,398.—September 13, 1887.—T. F. Edgeworth. An inhaler.
- Mixing Machine**—11,963.—September 3, 1887.—A. Struthers and W. R. Craig. A new powder-sifting machine for druggists and chemists.
- Perfumery**—12,416.—September 13, 1887.—L. Teltscher. Impregnating pulverulent substances with volatile essences.
- Poison Bottle**—12,121.—September 7, 1887.—E. S. Hermes. A bottle for poisonous liquids or other dangerous medicines.
- Preservation**—13,049.—September 27, 1887.—I. Allegretti. A preserving system for perishable articles. [Complete specification.]
- Rheumatism**—12,724.—September 20, 1887.—E. Wheeler. Rheumatic tincture.
- Resins**—11,805.—August 31, 1887.—S. Banner. Treating resins, oleo resins, gums, pitches, varnishes, bitumens, and other like substances.
- Skin Diseases**—12,913.—September 23, 1887.—Elizabeth Ireland. An outward application for the cure of eruptions and other diseases of the skin.
- Soap**—12,412.—September 13, 1887.—W. L. Byers. Improvements in soap tablets.
- Spatulas**—13,145.—September 28, 1887.—J. F. Golding. Spatulas used in the making and mixing of pills, ointments, powders, and electuaries.
- Tooth-brush**—12,673.—September 19, 1887.—W. F. Shields. A duplex, self-adjusting tooth-brush for cleaning the teeth outside and inside at the same time.

Surgical—11,445.—August 22, 1887.—A. J. Boulton. Surgical apparatus for making incisions without pain.—11,691.—August 29, 1887.—D. Kennedy. Artificial supports for spinal weakness.—11,817.—August 31, 1887.—W. P. Bullivant. Apparatus for winding or rolling wire netting.—12,351.—September 12, 1887.—J. P. Schenck. A combined speculum and syringe.—12,739.—September 20, 1887.—E. Nienstaedt. Bandage shell.—12,904.—September 23, 1887.—W. McKenzie. An instrument for the treatment of enlargement of the testicle.—13,016.—September 26, 1887.—C. W. Krohne & H. F. Sesemann. A cradle splint for the treatment of spinal diseases, &c.

Trusses—11,885.—September 2, 1887.—T. G. Daw. Trusses (variable local pressure pad).—12,503.—September 15, 1887.—P. Kirwan. A surgical truss.

Waterproofing—12,911.—September 23, 1887.—K. McLea & R. Punshon. A waterproofing composition.

Yeast—12,057.—September 6, 1887.—A. G. Brookes. Purifying yeast.

Specifications of Patents recently published.

1886.

10,488. M. Gamgee. Absorbent tissue for surgical dressings. 6*d*.

11,846. A. & L. Q. Brin. Production of ozone. 8*d*.

12,061. H. R. Lipscombe. Softening and purifying water. 4*d*.

12,064. F. Woolway. Non-alcoholic beverage, 4*d*.

12,253. J. Haslam. Chemical fire extinguishers. 8*d*.

13,168. E. M. Knight and A. H. Hobson. Liquid cement or gum. 6*d*.

14,617. O. Imray (The Society of Chemical Industry in Basle.) Ethylether of a new acid. 4*d*.

1887.

1,203. F. Wheeler. Affixing capsules to bottles, &c. 6*d*.

4,474. C. Kranz. Condiment preparation. 4*d*.

7,518. J. Belou. Hydrogen. 6*d*.

9,030. R. M. Kennedy. Vapour inhalers. 6*d*.

9,188. E. Hänsch and M. Schröder. Sulphuric anhydride. 6*d*.

9,215. R. Haddan (Allen). Instruments for the transfusion of blood, &c. 8*d*.

The following Patents have become void through non-payment of renewal fees:—

1883.

1,622. W. L. Wise. Carbonate of strontium.

1,697. J. H. Loder. Alcoholic solutions.

1,912. W. A. Rowell. Manufacture of carbonate of strontia.

1,971. W. Cooke (Schlotterhoss). Automatically exposing bodies to the action of the sun's rays.

2,160. O. Imray (Larger). Surgical injections.

2,283. F. Cook. Cleaners for feeding-bottles, &c.

2,326. H. J. Haddan (Moldenhauer and another). Purifying glycerine.

2,467. C. Pieper (Parmentier). Gumming apparatus.

2,559. A. Horne and another. Feeding bottles.

2,647. W. R. Barker and another. Food for infants, &c.

2,657. W. Burnham. Elastic waterproof compounds.

2,691. J. R. Young, junr. Artificial fertilisers.

2,726. H. W. Sharpin. Cutting corns.

2,798. W. R. Lake (Baugard). Extracting glycerine.

2,985. A. F. Spawn. Production of carbonic acid gas.

2,990. J. H. Johnson. (Crespel and others.) Treatment of phosphates of lime.

3,053. B. Nickels. Antiseptic fluids.

1882.

2,893. E. Reading (Buttner). Artificial teeth.

1881.

2,682. W. Green. Soaps.



BRONCHITIS KETTLE AND FOOD-WARMER.

MESSRS. DRAKE & HASSAM, of Churton Street, are the makers of a new bronchitis kettle, with which is combined a food-warmer. The kettle is of the ordinary shape, but the long tube is telescoped, so that the pieces cannot go amissing, and at the end is a spoon-shaped box to contain cotton-wool for holding any medicament, if it is desired to aromatise or medicate the steam. The cotton-wool is prevented from choking the orifice by means of a false tube continuous with the telescope tube. The food-warmer is a deep half-pint vessel which fits into a well at the side of the kettle. It is suitable for cooking beef-tea, warming milk, or any similar purpose for which heat is required in the bed-room. The combination is an excellent one, and should be a leading article during the coming winter.

ATKINSON'S "PERFECT" TRUSS.

MR. B. F. ATKINSON, of Mill Street, Hanover Square, W., the experienced truss-maker, has recently patented an invention applicable to hernia trusses. The mechanism of the pad of the truss is quite distinct from the spring, although in other respects (as will be seen from fig. 1) the instrument

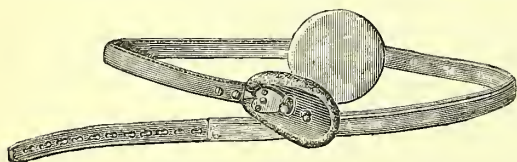


FIG. 1.

resembles an ordinary truss. The spring is connected with the pad by means of a short bar, with a ball at the end of it. This ball fits below the plate B (fig. 2), forming a ball-and-

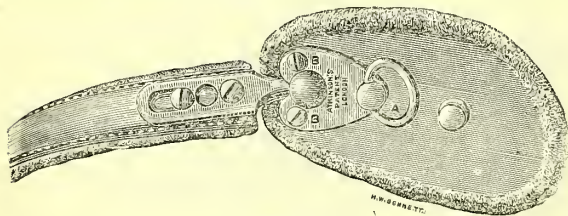


FIG. 2.

socket joint; the object of this is to allow the pad to be adjusted to any position, and thus to suit any case of hernia. When an alteration in the position of the pad is required, the binding screw A is released, the pad adjusted, and the screw again tightened. The stuffing of the pad has received special attention, so that, once the pad has been adjusted to the proper position, all the mechanical means necessary for the cure of hernia are secured. As will be noticed from the figure, the truss may be lengthened a little, but the maker prefers to make the trusses to fit particular cases.

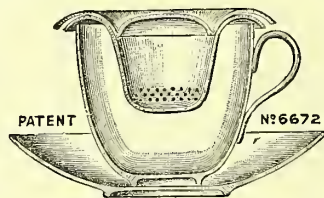
CHOCOLATINE.

MESSRS. WATSON & WATES are sending out under this name a flaky powder, of pleasant taste, which forms with boiling water excellent and nutritious chocolate. The

form in which the article is put up for sale, and the pleasant character of the beverage made from it, are features which should make it an article for chemists' sale.

THE HOBBS ANTI-TANNIC INFUSER.

THE patentee of this little apparatus states that tea should be made by adding the tea to the boiling water, not by pouring boiling water on the tea. By adopting his infuser, several advantages are secured. The infuser rests in any tea-cup or breakfast-cup, as shown in the engraving. After filling up with boiling water, a tea-spoonful of tea is added in the infuser, the whole is covered with an exactly-fitting cover, and the infusion goes on for three minutes. At the end of that time the infuser is lifted out and set on the cover, which now serves as a saucer for it, and a cup of clear infusion remains which, while it gives all the aroma of tea, naturally contains the least possible proportion of tannic. We find that tea is more quickly as well as more perfectly prepared by this process than by the old method of infusion in the pot. The apparatus is entirely made of white china, and will prove useful to chemists in making small quantities of other infusions.



Gazette.

PARTNERSHIPS DISSOLVED.

MOON & HARRIS, Harley Street, W., dental surgeons.

ROSE & REYNOLDS, High Wycombe, surgeons, physicians, apothecaries, and accoucheurs.

SMITH, G. H., & T. V. NICHOLL, Upper Clapton, surgeons and general medical practitioners.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

DAVIS, THOMAS HENRY, & GEORGE LISTER LAIRD (trading as Davis & Laird), Liverpool, paint manufacturers.

GLANVILLE, FRANCIS FERRATUS, Clareville Grove, late of Queen's Gate, South Kensington, surgeon.

HORNER, JAMES READ, Salterhebble, near Halifax, chemical manufacturer.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

BLYTH, WILLIAM FRANCIS, Victoria Park Square, Bethnal Green, surgeon. Oct. 14, 33 Carey Street, Lincoln's Inn; Nov. 3, 34 Lincoln's Inn Fields.

HORNER, JAMES READ, Salterhebble, near Halifax, chemical manufacturer. Oct. 21, Official Receiver's office, Halifax; Nov. 8, County Court House, Halifax.

ADJUDICATIONS.

BLYTH, WILLIAM FRANCIS, Victoria Park Square, Bethnal Green, surgeon.

DAVIS, THOMAS HENRY, & GEORGE LISTER LAIRD (trading as Davis & Laird), Liverpool, paint manufacturers.

HORNER, JAMES READ, Salterhebble, near Halifax, chemical manufacturer.

WIGFALL, WILLIAM, the younger (trading as William Wigfall, jun., & Co.), Sheffield, brush manufacturer.

SCOTCH SEQUESTRATION.

MACKAY, W., Aberdeen, chemist and druggist. Oct. 12, at 12, Adelphi Hotel, Aberdeen.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., October 13.

THE Board of Trade Returns for the month of September, which have been published since our last report, are, broadly speaking, of a favourable character. We imported from abroad 1,706,911*l.* less than in September, 1886, a difference of about 6 per cent., chiefly accounted for by a diminution of our imports of articles of food and drink, raw materials, and foreign manufactured goods. The imports of chemicals and dyestuffs are diminishing seriously, the loss being about 5 per cent. for the first nine months of the year. Our exports show off well, having been 904,855*l.*, or about 5 per cent. more last month than in September, 1886. It is especially satisfactory to find that nearly the whole of this increase is due to heavier shipments of manufactured goods. Of chemicals and medicinal preparations we exported 5,082,612*l.* worth in the first nine months of 1887, against only 4,952,345*l.* in the corresponding period of 1886. Our re-exports of foreign and colonial produce also increased by about 1½ per cent. for the month, and 5 per cent. for the three quarters. In the drug and chemical market the week has been a quiet one, and very little of any interest has transpired, either at the public sales or privately. An advance has occurred in insect flowers, and ergot of rye is also said to have changed hands at improved rates. The supply of ipecacuanha is being bought up privately. Musk, civet, orris root, and anise are tending higher, but opium is cheaper at Smyrna, and American oil of peppermint is reported from New York to be obtainable at lower rates. Shellac has also lost ground, while gambier is steadier. The cinchona auctions passed off without material change. Quicksilver has been further advanced this week, and all mercurials have followed suit. Cream of tartar and soda crystals are firm, but citric acid, copper sulphate, and soda bicarbonate may be had cheaper. Turpentine and olive oil have risen in value, while cod-liver oil is very firm, but on the other hand linseed and cotton-seed oils are lower. More money has been paid for Japan wax. As regards spices there has been a slight rise in chillies and pimento, but cloves and cassia lignea have given way, and other spices are quiet.

In consequence of the increased price of spirit in Germany it is very probable that all quotations of chemicals in the manufacture of which alcohol is used will be raised.

ACID (CITRIC) is still declining slowly, and no higher price than 1*s.* 7½*d.* per lb. can be quoted to-day.

ACID (OXALIC) firmer at 4*d.* per lb.; *Sal acetos* 6*d.*

ACID (TARTARIC) remains quiet but unchanged. *Foreign*, 1*s.* 6½*d.*; *English*, nominally, 1*s.* 7*d.* per lb.

ALUM.—In fair demand at previous quotations of 6*l.* for ground in bags, and 5*l.* 7*s.* 6*d.* to 5*l.* 10*s.* for loose lump.

AMMONIA COMPOUNDS.—*Carbonate*, neglected at 4*d.* per lb., less a discount; *Sal ammoniac* steady, but in limited request, at 34*s.* for firsts, and 32*s.* per cwt. for seconds; *Sulphate*—Beckton is still held at 11*l.* 15*s.*, but other makes are tending lower, at 11*l.* 12*s.* 6*d.* for grey 24 per cent. At Hull the spot price is 11*l.* 12*s.* 6*d.*

ANISE.—*Italian* and *Spanish* seed have advanced since our last report, the former to 38*s.* to 42*s.*, and the latter to 45*s.* to 55*s.* per cwt. *Russian* seed is also showing signs of greater steadiness, and it is said that in the interior of Russia more money is asked. Here parcels still change hands at 22*s.* to 23*s.* per cwt. Fine *Chin* star anise has been sold by private contract at 75*s.* per cwt.

ARSENIC is somewhat less steady, but a fair business is passing at 11*s.* 3*d.* per cwt. for white powder.

BALSAMS.—*Canada* remains firm at the prices last quoted, but without much business. *Copaiba*—The stock is being reduced by private purchases, and prices are still tending higher. *Peruvian* is going from bad to worse. Price nominal at 4*s.* 6*d.* per lb. for good.

BLEACHING POWDER.—The article is firm, with business at 8*l.* 15*s.* per ton.

BROMINE.—No price has yet been fixed, so far as is known, by the convention of producers. *Bromides* are all unchanged, English brom. pot. at 1*s.* 7*d.* per lb.

CALUMBA.—Supplies continue to arrive freely.

CANARYSEED.—The trade during the last fortnight has been fairly steady, and prices for the current qualities are maintained. The supplies of *Turkish* seed have been moderate, but considerable quantities are now due to arrive shortly, and it remains a matter of speculation how these will be received when we have only the home demand to fall back upon for an outlet. The position of the English market, which used to be looked upon as a depot for the greater part of the world's supplies, has undergone a thorough change. The main requirements abroad are now mostly provided for by shipments either direct or in transit, and only a moiety is retained for the English market. This circumstance must be taken into account when comparing our stocks and supplies with former seasons. At present there are still numbers of parcels of old seed being held over, for which holders expect to realise the same, if not higher, prices than for new. Fair average new sells at 41*s.* to 44*s.*; extra quality, 45*s.* to 47*s.* per 464 lbs. ex warehouse. In *Morocco* and *Spanish* seed a more important trade is now done, at 49*s.* to 51*s.* for the former, and 52*s.* to 54*s.* for the latter. For new *Dutch* and *Spanish* seed 53*s.* is asked without attracting buyers. Ordinary *Dutch*, 52*s.* 6*d.* *English* is only occasionally seen.

CARAWAY SEED remains firm with little business. *Dutch* and *English* seed are quoted at 28*s.* to 30*s.* per cwt. *Russian* seed, though tending higher, may still be had at 23*s.* to 24*s.*

CARDAMOMS.—The exports from Ceylon are still on the increase. From October 1, 1886, to September 8, 1887, they amounted to 306,157 lbs., against 224,888 lbs. in the same period of 1885-6, and 146,017 lbs. in 1884-5.

CASSIA LIGNEA very dull of sale at 22*s.* 6*d.* per cwt. At the auctions 431 boxes first-class sea damaged cassia sold without reserve at 20*s.* to 20*s.* 6*d.* per cwt. We hear that the stock of cassia lignea at Canton is assuming enormous dimensions, being about 50,000 piculs in boxes and 50,000 piculs in bales, which is a larger stock than has existed for years. This is owing to the fact that a uniform export tax on cassia is now levied throughout China, and that the producing districts which formerly shipped *viâ* Pakhoi, a centre where exceptional advantages were offered them, now send the whole of their supply to Canton. Moreover the crop now is forwarded to Canton immediately after gathering, while formerly it took nearly a twelvemonth for cassia to reach Hong Kong and other shipping ports.

CINCHONA.—At the periodical auctions on Tuesday the supply of East Indian barks was rather in excess of that offered at the previous sales, the entire quantity catalogued numbering 2,493 packages, of which 2,321 were of Ceylon growth. Owners sold readily, and succeeded in disposing of nearly the whole of the supply at about previous prices for ordinary and medium, and a slight reduction for better class barks. The unit ranged from 1¼*d.* to 2*d.*. Only 865 packages *South American* cinchona were offered, of which 220 found purchasers, soft Columbia, imported in 1880, at 3*d.*, and old Cuprea at 3*d.* to 3½*d.* per lb.

Ceylon bark sold as follows:—*Succirubra*, natural branch at 1*d.*; stem chips, 2*d.* to 5*d.*; spoke-shavings, 2½*d.* to 5½*d.*; root, 3*d.* to 4½*d.*; renewed, ordinary to fine, 2½*d.* to 9*d.* *Officinalis*, branch, 1½*d.* to 2½*d.*; chips, 2*d.* to 5*d.*; spoke-shavings, 3½*d.* to 5½*d.*; root, 5½*d.* to 8½*d.*; renewed, 3*d.* to 11*d.* *Hybrid*, &c., branch, 1½*d.* to 2½*d.*; chips, 2½*d.* to 5½*d.*; spoke-shavings, 3½*d.* to 5*d.*; root, 2½*d.* to 8*d.*; renewed, 5½*d.* to 9*d.* Java bark, of which the assortment was not a very fine one, sold as follows:—*Ledgeriana*, branch, 2½*d.* to 4*d.*; chips, 3½*d.* to 9*d.*; spoke-shavings, 8½*d.*; root, 5½*d.* to 8*d.*; renewed, 9*d.* *Officinalis*, stem chips, 5½*d.*; root, 5½*d.* to 6½*d.* *Succirubra*, chips, 2½*d.* to 9*d.*; root, 2*d.* to 4½*d.*; quill, long silvery but irregular druggist's, 8*d.* to 9*d.* per lb. The

exports from Ceylon in the period between October 1 and September 8 have been as follows:—1886-7, 13,597,174 lbs.; 1885-6, 14,701,578 lbs.; 1884-85, 10,659,294 lbs. The latest mail advices state that the unit at Colombo ruled above the London parity, but that holders showed no inclination to sell, anticipating an improvement in the London market. There has been a good demand privately for *Maracaibo* bark, and a considerable quantity has changed hands. There is now very little offering, for which 8*d.* to 8½*d.* per lb. is asked.

CIVET remains very scarce, and fine quality, if offered would bring a high price.

CLOVES.—Zanzibar are lower since our last report. At the weekly auctions only 104 bales *Zanzibar* were offered, of which 25 sold at 11½*d.* per lb. for good bright. *Penang* cloves, on the other hand, are advancing, 34 cases having been sold "without reserve," fair up to 12½*d.*, and good at 13*d.*

COCAINE.—Lower prices are quoted, say 9½*d.* for wholesale quantities.

COPPER (SULPHATE) is somewhat lower, at 13*l.* 10*s.*

CREAM OF TARTAR.—The scarcity continues, and 130*s.* is still asked for firsts on the spot, while higher rates are anticipated.

CUMINSEED remains scarce and dear. For *Maltese* seed 48*s.* to 49*s.* per cwt. is required, and 28*s.* to 30*s.* for *East Indian*.

ERGOT OF RYE.—It seems now quite clear that the advance has not yet spoken its last word, and it is quite possible that famine prices may rule ere long. Russia and Germany have been scoured for supplies, but none are forthcoming; and although, no doubt, several parcels are held back here and there, we need not look to those countries for any material assistance in our requirements. The whole of the new Spanish crop is concentrated in the hands of a single firm, who demand 3*s.* per lb. for it. To-day it was reported that 3*s.* per lb. had actually been paid at Vigo, in Spain, for ergot of the new crop. The high prices quoted here have checked business to some extent.

FENUGREEK SEED.—Supplies have now been quite wanting for some time, but the demand, especially for export, continues unabated. There is now but a small stock left here, which is quoted at 8*s.* to 8*s.* 6*d.* per cwt.

GALLS.—*China* remain steady, with sales on the spot at 57*s.* per cwt. *Japan* quiet, at 53*s.* to 55*s.* per cwt.

GAMBIER.—On the spot *Block* is difficult to procure, and nothing is now obtainable under 25*s.* per cwt. For arrival, 23*s.* per cwt. has been paid for 100 tons, September-October shipment. At the weekly auctions 189 bags *Cubes* were catalogued, but bought in.

GENTIAN ROOT remains very firm, and 17*s.* 6*d.* per cwt. has recently been paid. In Southern Europe prices are advancing, and the article is becoming very scarce.

GLYCERINE is in good demand, but the price still remains at 80*l.* per ton for 1,260 s.g. for well-known brands.

GOLDEN SEAL ROOT.—In America prices have advanced to the parity of to 1*s.* 6*d.* per lb., which is quoted here.

GUM ARABIC.—Since our last report there has been a fairly steady demand for gum arabic, generally at late rates. *Barbary* gum remains quiet. The new arrivals are only partially ready for sale as yet. As regards *East Indian* gums, Aden is in demand, and one parcel reported to have been sold at 7*l.* 10*s.* per cwt. Amrad shows no alteration. Ghatti has been inquired for, but we do not quote any change in same. *Barbary* character continues to be quoted at 5*l.* 12*s.* 6*d.* per cwt. Some of the *Egyptian* Amrad gums are being more pressed for sale. *Turkey sorts* remain unchanged. Of *Senegal* gum, fine quality is scarce and dear; 7*l.* per cwt. has been paid in London. From Bordeaux we hear that there is scarcely any gum obtainable on the spot. About 10,000 bags which were imported into Bordeaux recently have all been sold already. Another 300 tons arrived a few days ago, but the prices of the new Galam crop have not yet been fixed.

HONEY.—At Liverpool 196 kegs of *Chilian* were lauded last Friday.

INDIGO.—The periodical auctions, the last of the present

year, commenced on October 10, and were continued on the two following days. The quantity declared for sale was 5,770 chests, of which 491 were withdrawn before the sale began, leaving 1,960 chests Bengal, 48 Oude, 2,280 Kurpah, 470 Madras, 460 Bombay, 53 Manila, and 26 musters; total, 5,729 chests, of which 2,156 chests were sold.

The sale was disappointing to all holders of indigo. The prices which could have been realised in July, and which were then refused by importers, could not be obtained for the same parcels at the present auction, and some few lots of new goods also failed to reach valuations. As a rule, importers supported the market by withdrawing 2,711 chests, and buying in 894 chests. The variations as compared with the previous auctions were as follows: Bengal and Tirhoot sold on an average at par to 2*d.* under July rates; Kurpah, good, 3*d.* to 4*d.* per lb. higher; middling red, 2*d.* to 3*d.* ditto; middling blue, par, ordinary and low, 2*d.* to 4*d.* per lb. lower; dry leaf Madras, good par, ordinary and low, 2*d.* to 3*d.* per lb. lower. The following are the prices obtained: *Bengal*.—good violet and red, 5*s.* 4*d.* to 5*s.* 9*d.*; middling ditto, 5*s.* 1*d.* to 5*s.* 3*d.*; ordinary ditto, 4*s.* 10*d.* to 5*s.* 1*d.*; good violet and copper, 4*s.* 11*d.* to 5*s.* 2*d.*; middling ditto, 4*s.* 10*d.* to 5*s.*; consuming: good and fine, 4*s.* 8*d.* to 5*s.* 2*d.*; middling and good middling, 4*s.* 6*d.* to 4*s.* 8*d.*; good ordinary, 4*s.* to 4*s.* 4*d.*; ordinary and low, 3*s.* to 3*s.* 11*d.*; trash and washings, 1*s.* 6*d.* to 3*s.* 6*d.* per lb. *Oude*.—Middling to good middling (plant Oude), nominal, 4*s.* to 4*s.* 2*d.*; ordinary and good ordinary (ditto) ditto, 3*s.* 6*d.* to 4*s.*; good ordinary to good (native Oude) (ditto), 2*s.* to 3*s.* 3*d.* per lb. *Madras*.—Good middling to good native, 2*s.* 8*d.* to 3*s.*; ordinary to middling, 1*s.* 5*d.* to 2*s.* 6*d.*; very ordinary ditto, 1*s.* 3*d.* to 1*s.* 4*d.* per lb. *Kurpah*.—Good to fine, 3*s.* 10*d.* to 4*s.* 6*d.*; good ordinary to good, 2*s.* 10*d.* to 3*s.* 8*d.*; low to ordinary, 1*s.* 7*d.* to 2*s.* 8*d.* per lb.

INSECT FLOWERS.—The stock at Trieste, it appears, has been greatly over-estimated, and when American orders arrived prices advanced rapidly. To-day open flowers are quoted at from 200*s.* to 225*s.* per cwt. c.i.f., but even at these high rates there is very little offering.

IODINE.—The position of this article is very firm. The price still remains at 9*d.* per oz.; *resublimed* at 14*s.* per lb.; *potass. iodide*, at 11*s.* 3*d.* per lb.

IPECACUANHA.—Since the auctions a large private business has taken place at an advance of 4*d.* to 6*d.* per lb. on auction prices. Nothing can now be had under 4*s.* 2*d.* per lb. for fair root.

JUNIPER BERRIES.—In Italy prices continue to advance, and the very small quantity which has been gathered is all concentrated in the hands of speculative holders.

LINSEED is firmer, especially for the *Dutch* variety, which is very tightly held at 43*s.* to 45*s.* per 424 lbs. *Hungarian* and *Sicilian* steady at 40*s.* and 45*s.* respectively. Of *East Indian* seed, Bombay is quoted at 29*s.* and Calcutta 1*s.* less. For fine *English* seed 48*s.* per imperial quart is asked.

LYCOPodium.—Prices are tending lower, the new crop having turned out good. It is advised that care should be taken to guard against the purchase of badly sifted seed, of which there are a good many parcels in the market. The nearest price is 1*s.* 4*d.* per lb.

MERCURIALS are all 1*d.* per lb. dearer, owing to the advance in quicksilver.

MORPHIA still unchanged at 7*s.* 6*d.* per oz., manufacturers' price, but second-hand offers rather lower.

MUSK.—We hear that part of the small supply of fine *Tonquin* pods, first pile, offered at the last drug sales has since been sold at an advance upon the previous quotation, and as our stock appears very low prices may go higher next week.

MUSTARD SEED.—White seed offers on a very liberal scale, and values remain low with a weak tendency, say 8*s.* to 10*s.* 6*d.* per bushel. *Brown* seed is slightly steadier.

NUX VOMICA.—The demand continues very good. Fair quality is worth 14*s.* per cwt.

OIL (COCONUT).—There is not much doing and prices remain steady, *Cochin* at 31*l.* to 32*l.* according to quality, *Ceylon* at 23*l.* 15*s.* to 24*l.*, and *Mauritius* at 25*l.* 10*s.* In Ceylon the market is very firm and prices are advancing, the

mills being full of orders. The exports from Ceylon in the periods between October 1 and September 8, are:—1886-7, 271,457 cwts.; 1885-6, 208,041 cwts.; 1884-5, 258,589 cwts.

OIL (COD-LIVER).—There has been a fair amount of business in this article since our last report, though principally, so far as we can ascertain, in ordinary and medium qualities. Various prices are asked by the different holders, but 3s. 4d. to 3s. 6d. for congealable, and up to 4s. and even 4s. 3d. for non-congealable oils are the nearest quotations.

OILS (ESSENTIAL).—*Anise* unchanged at 8s. 6d. per lb. for English, and 7s. 3d. per lb. for star anise. *Cassia* very quiet and dull; 2s. 7d. to 2s. 7½d. per lb. would no doubt buy, but there is no life in the article. *Cinnamon* without change, from 1s. 6d. up to 2s. 6½d. according to quality. No oil has been shipped from Ceylon lately, and the exports stand:—October 1, 1886, to September 8, 1887, 54,501 oz.; 1885-6, 94,000 oz.; 1884-5, 100,895 oz. *Citronella* lifeless at ¾d. to 1½d. per oz. for native brands. Ceylon exported between October 1 and September 8, 8,131,511 oz. in 1886-7, 6,004,294 oz. in 1885-6, and 5,591,378 oz. in 1884-5. In Italian oils prices remain firm, the average quotations for commercial *lemon* being 4s. 9d. to 5s. per lb., for *bergamot* 7s. to 7s. 3d. per lb., and for *orange* 4s. 6d. per lb. No oils are yet coming forward from Messina, but there is a very large stock, especially of old *lemon* in this country, and supplies may be brought from Palermo and Reggio. In *Otto of rose* some trade is doing at 20s. 6d. per oz. for well-known brands, though some importers ask more. American Oil of *peppermint* (HGH) has been sold on the spot at 12s. 9d. per lb. Our cablegram to-day speaks of a further decline in America. English oil is steady at 28s. per lb. for Mitcham, without change in price, but business is quiet, especially for export to Germany, the liqueur manufacturers in that country abstaining from buying at present owing to the new Spirit Law. Japanese oil offering at 3s. 6d. per lb. Menthol crystals somewhat firmer at 3s. 6d. to 4s. 6d. per lb.

OILS (FIXED).—*Cottonseed* oil is cheaper, and closes at 18½d. for crude and 20½d. for refined. *Linseed* quiet and tending lower. The following are the quotations:—Spot here, pipes, 19½d. to 19½d. 12s. 6d.; barrels, 19½d. 12s. 6d. to 19½d. 15s.; October, 19½d. 12s. 6d.; November-December, 19½d. 10s. to 19½d. 12s. 6d.; January-April, 19½d. 15s. Business has been done for January-June at 19½d. 15s. *Palm* oil remains quiet at 22½d. for fine Lagos. *Petroleum* firm, 5½d. to 5½d. for American oil on the spot, 5½d. for October-December, and 5½d. for January-April. Russian petroleum, 5½d. to 5½d., spot, and 5½d. for October-December. *Rape* oil unchanged. There are buyers at 24½d. for English brown on the spot. Refined is held at 25½d. 5s. to 25½d. 10s.

OIL (OLIVE).—There is very little oil offering here, and prices are advancing in sympathy with the unfavourable crop reports from the principal producing centres. In London *Mogadore* has been sold at 33½d., and *Messina* oil at 35½d.

OIL (TURPENTINE).—The position of the article has further improved since our last report, and American spirits on the spot are to-day quoted at 26s. 3d. per cwt., October-December at 26s. 6d., and January-April at 26s. 9d. to 27s. per cwt. In France prices of French oil have advanced.

OPIMUM.—Mail advices from Smyrna dated October 1 report that during the week then ending fair sales had taken place for manufacturing purposes at unchanged rates, mostly for export to America; but as nothing had yet transpired concerning the Dutch Government purchases, and certain holders had become very short of money, the tendency of the market was decidedly towards lower quotations. Cable reports received this week confirm this report, and state that there has been a fall on the Smyrna market, especially in old opium, much of which was in the hands of the weakest holders. The arrivals of the new crop at Smyrna on October 1 were 520 baskets (including 78 *Salonica*), against 3,021 baskets at the corresponding date of the preceding year.

ORRIS ROOT.—The demand is growing, but supplies of Italian root are becoming scarcer, the new crop having been a very small one indeed.

POTASH COMPOUNDS.—*Bishromate* quiet, and offering at 4½d. per lb.; *Chlorate* is firmly held at 6d. per lb.; and yellow *Prussiate*, according to quality, is quoted at 7½d. to 7½d.

QUICKSILVER.—On Monday the principal importers ad-

vanced their quotation to 7½d. 15s. per bottle, where it now stands. The market is very firm at the price. Our stock has been greatly reduced during the month of September, the imports into London amounting to only 510 bottles, and the deliveries for export to 3,367 bottles. To this should be added the home consumption, which can be only estimated, but may have amounted to between 850 and 1,000 bottles.

QUININE.—The forced sale of 53,000 oz. *Italian* quinine last week has not exercised any appreciable influence on the market. During the commencement of the week a fair business was transacted in second-hand lots. Some of the *Italian* quinine sold at the last drug sales has changed hands since at a small profit. *English* quinine (Whiffen's) has been sold at 1s. 5½d. per oz., it is said, by the second hand. *German* in bulk is quoted at 1s. 6d. per oz.

RAPE SEED.—The tone remains firm. Offers of fine *English* seed are restricted. 43s. to 48s. per qur. are the current prices. *Foreign* seed is so much wanted at home for crushing that exportation is only attempted where exceptional shipping facilities exist; 44s. to 48s. per 424 lbs. has been paid for the latter. East Indian qualities very firm and dearer.

SAFFLOWER.—Good to fine *Bengal* is quoted at 90s. to 120s. per cwt.

SENNA.—We note further arrivals of 141 bales of *Tinnevely* this week.

SHELLAC.—The week opened with a decidedly easier feeling and sales of *AC garnet* lac at the lower price of 39s. per cwt. At the auctions on Tuesday 939 chests were catalogued, and holders showed a good deal of readiness to sell. Under these circumstances 500 chests were disposed of at a decline of from 2s. to 3s. per cwt. for *second orange* lac. The parcels sold include the following brands:—RPG in house at 45s. to 45s. 6d.; KD in diamond at 45s. for good, and 43s. for livery; KB in diamond, WBSC in house, and E&O, III, at 44s. to 44s. 6d.; M in diamond, rather livery, at 43s. 6d. to 44s.; *Button*, dull unworked seconds, at 49s. 6d. to 50s. per cwt. A good deal of this was sold "without reserve." For arrival TN standard orange is also 1s. 6d. cheaper, distant shipment having sold at 46s. per cwt. c.i.f. With reference to the false marking of DC orange lac, to which we referred some weeks ago, an American journal states that false marking of shellac is by no means of uncommon occurrence in the American markets.

SODA COMPOUNDS.—*Ash* quiet at 1½d. *Bicarbonate* is a shade easier, and now quotes at 6½d. 10s. per ton, at which price there are buyers. *Caustic* firm at 7½d. 5s. for cream, and 7½d. 10s. for white 60 per cent. *Crystals* remain unchanged on our market at 2½d. 12s. 6d. per ton, but at Newcastle-on-Tyne 2½d. 6s. is now the price, being slightly dearer. Refined *Nitrate* firm at 9½d. 7s. 6d. to 9½d. 10s. on the spot, according to quality.

SPICES (VARIOUS).—*Arrowroot* remains quite neglected, at 2½d. for good St. Vincent. *Chillies* are still rising in value, 28s. 6d. per cwt. having been paid for fair bright Zanzibar. *Cochin Ginger* remains steady; very little was offered at the public sales, and only 106 packages sold: good rough, small to medium, 25s. 6d. to 26s.; fine bright rough, medium to bold, 34s. to 36s.; bright bold selected ditto, up to 50s. per cwt. *Mace* quiet at unchanged rates; good West India sells at 2s. 5d. to 2s. 7½d., fine at 2s. 9d. per lb. *Nutmegs* in good demand at last week's rates. *Pepper* unchanged and quiet for black, but rather firm for white: ordinary light Atcheen, 13-14 per cent. dust, sold at 6½d. per lb.; grey to fine dark Aleppy at 8½d. to 8½d. per lb. White Penang sells at 10½d. per lb. *Pimento* is advancing, and the position seems very strong; fine clean Jamaica sells up to 2½d. per lb.

TALLOW.—There has been a slight advance in *Russian*, St. Petersburg yellow candle on the spot being now held at 32s. per cwt. *Australian* is quoted at 23s. to 23s. 9d. per cwt. for mutton, and 21s. 9d. to 22s. 6d. for beef.

TURMERIC.—At the weekly auctions 230 bags *Bengal* were bought in at 10s. 9d. per cwt., and 746 bags *Madras* at 8s. 9d. to 9s. per cwt.

VANILLA.—The latest mail reports from Mauritius state that the crop was being actively gathered at the end of

August, the weather being extremely favourable for the curing of the beans. The crop was expected to be much in excess of last year's.

WAX (BEES').—There is some inquiry for good yellow *Ceylon* wax, which would be worth 100s. per cwt.

WAX (JAPAN), continues to advance. At the end of last week 56s. per cwt. was paid for small quantities, after which holders raised their quotations to 57s. 6d. per cwt.

AMERICAN CABLEGRAM.

NEW YORK, October 13.

ERGOT OF RYE.—A large business is being done in this article at rapidly advancing prices, but as higher rates are asked after each sale it is impossible to give an accurate quotation.

OIL OF PEPPERMINT.—H. G. Hotchkiss's brand is quoted at \$2.65, equal to 12s. per lb. laid down in London. This fall has been brought about, no doubt, by speculators who want to buy cheap, and a large business is being done at the reduced quotations.

SENEGA ROOT.—Good bright Western root is becoming extremely scarce and in active demand. Holders decline to sell except at higher rates.

QUININE.—A further fall in prices has taken place, and notwithstanding the low values now ruling there is a widespread feeling that still lower rates will shortly be accepted.

THE DUTCH MARKET.

AMSTERDAM, October 12, 1887.

CINCHONA.—The public sale, October 20, will consist of 1,459 bales and 228 cases Java cinchona, of which 443 bales and 92 cases are from the Government plantations. The following is the description of the quantity:—81 cases *Succirubra* (pipes) quills; 190 bales broken and chips and shavings; 36 bales root. Ninety-four cases *Calisaya* Schubkraft (pipes) quills; 33 bales broken (pipes) quills; 28 bales root; 24 bales *Anglica* chips. Three cases *C. Ledgeriana* (pipes) quills; 899 bales 49 cases chips; 224 bales root. One case *Officinalis* (pipes) quills; 25 bales chips.

COCOA BUTTER.—On October 4 about 25 tons van Houten's were sold here, at the same hour that 30 tons Cadbury's were auctioned in London. At Amsterdam the lightest variety (A) realised 75½c. to 77c., B, 73½c. to 76c., and C (the darkest) 75½c. to 75¾c. per ½ kilo., net cash. The fact that similar prices were paid in the London auctions proves that 13c. to 14c. per lb. is the actual value of cocoa butter, and that the consumption keeps step with the increasing production of the article. The time is not so far back when all the makers of cocoa powder in Holland together did not produce 50 tons of butter a year, and when an order for cocoa beans was usually combined with the condition that 10 per cent. of the value of the order should be taken out in butter of cocoa, a condition which in many cases was refused by the selling party, who found it too dangerous to keep a stock of a few hundred pounds of cocoa butter. At that time cocoa butter was used principally by apothecaries, whilst the chief buyers now are manufacturers of chocolate and cocoa sweetmeats.

CUBEBS.—The stock in Holland is at present 186 bales in first hand, 56 bales in second hand, and the price asked is 3f. per ½ kilo., or 25l. per cwt., at which holders are very firm. There is no chance to buy lower, and owners are not even inclined to sell more than a part at once at 3f., in the expectation of much higher prices later on.

GREEN ORANGE PEEL from the Dutch colony of Curaçao in the West Indies is largely used by our liqueur manufacturers. It is imported direct from Curaçao, and there is a parcel in the market at present. Our manufacturers also employ Italian orange peel, which they get from Leghorn and Messina. Anise seed, which they use in very large quantities, they draw from Spain (Alicante); neither the Russian seed nor the essential oil is used here. The manufacture of liqueurs as an industry dates from over three centuries, the oldest firm known being the Erven (heirs of) Lucas Bols. This Lucas Bols in his day, which was in the second half of the sixteenth century, distilled his liqueurs in a small wooden shed or "lootsje" in the suburbs of Amsterdam, which factory became a popular house of call of excursionists. Hence Lucas Bols' factory became known as the "Lootsje," and bears that name until this day. Dutch liqueurs are exported to all countries of the world, France being one of the principal customers. It is said that Bols' firm in 1885 distilled no less than 32,800 gallons of French alcohol 36 degrees. The total export of Dutch liqueurs in 1885 was 71,544 gallons. One firm of distillers manufacture no less than 178 different varieties of liqueurs.

GUM COPAL.—There will be a sale on October 18 of 365 cases and 123 baskets, about 32 tons, and 252 packages, about 24 tons in all.

GUM DAMAR.—In sale on October 18 will be offered 368 cases, 66 bales, together about 27 tons.

RED ROSE LEAVES have advanced from 1s. 7½d. to 2s. 10d. per lb. If reports from the few owners are correct, only about 1,000 lbs. remain in hand.

THE DUTCH COCOA INDUSTRY.—There are about ten chocolate and cocoa manufacturers in Holland, whose yearly requirements of cocoa beans may be estimated at 3,000 tons in round figures, principally of the Guayaquil, Caracas, and Domingo kinds. They mostly manufacture cocoa preparations, known by the name of soluble cocoa, cococate, and cocoa powder—viz., the roasted and powdered cocoa beans, deprived of most of their natural fat, and the cocoa butter, which is used as a valuable ingredient by manufacturers of chocolate, cocoa sweetmeats, and also for pharmaceutical purposes. The oldest of the Dutch cocoa works was founded on a small scale more than a century ago, and most of the other works have existed from forty to sixty years, but all of them remained insignificant until the before-named powdered preparations found their way to foreign countries, especially England and Germany, where certain Dutch brands of powdered cocoa have been very well received and enjoy a large sale. There are people who supposed that the superiority of Dutch cocoa powder is to be attributed to a peculiar mode of manufacture different from the methods followed in other countries. The idea to extract the fat from the roasted cocoa beans and to sell the powder is said to have originated in the brain of a Dutch chocolate-maker about 1830.

THE GERMAN MARKET.

HAMBURG, October 11.

THE last week has been one of extreme dullness, and hardly any business has been done. Prices are generally unchanged, but must be considered nominal.

The prices in this column are given in marks (11½d.) per 100 kilos., or per kilo. (1 kilo. = 2 lb 3½ oz; 50 kilos. = 1 cwt.). The prices in parentheses show the parity in London.

ALOES.—There is very little business doing here, and prices are rather lower.

ANTIMONY.—No stock of *Japanese* exists on this market.

BALSAMS.—*Copaiba* continues to advance, and very little is now offering; 3.85m. to 3.90m. (1s 9d.) may now be quoted. *Peruvian* weak, and tending lower; the new arrivals of 40 cases found no buyers. *Tolu* firm, though no further advance in value has taken place. Of *Canada*, 12 casks came to hand this week.

BARKS.—*Cinchona*.—Porto Cabello in good yellow quality is very scarce here, and extreme prices are asked for this variety. Of the *Lima* variety about 70 bales were sold at 97½m. (4½d.). In *Condurango* there is still a pretty active demand, and stocks are getting very small. As it is reported that there are no shipments to be expected, it is likely to see very extreme prices before long. *Quillaya* unchanged, at 29½m. to 30m. (13l. 5s.), with sales of small extent at that figure.

CAMPHOR (REFINED) is firm at previous prices, with only a moderate demand.

ERGOT OF RYE.—The improvement noticed in our last report has been well maintained, and nothing can be had now under 4.50m. (2s. per lb.) for good old grain.

MENTHOL.—Very little business. A lot prime Japanese crystals, ex *Cassandra*, is offering at 8¼m. (3s. 6d.).

OILS (ESSENTIAL).—There have been but few important changes in the market during the past week. *Star anise* is unchanged, holders still ask 16½m. (7s. 6d.). *Cassia* without business. *Peppermint*.—There were small sales of H. G. Hotchkiss brand last week at 11½m. to 11¾m., 12m. being now asked. *Japan* oil remains in good demand; about 1,100 kilos. are offered at the very low price of 8½m. (3s. 9d.).

QUININE.—Quite neglected.

SANTONINE sells very slowly, but at firm prices, viz., 12¾m. to 13m. (5s. 9d.).

SEEDS.—*Cumin* remains scarce at 97m. on the spot. *Musk* unchanged at very low prices, there being only a small inquiry on the part of consumers. *Sabadilla* is quiet, and prices without change.

WAX (VEGETABLE).—Very steady, and higher prices may be expected, the supplies being short.

LAST MONTH'S TRADE STATISTICS.

THE Board of Trade Returns for September show the following figures:—

Imports.

	Sept., 1886	Sept., 1887
Total value	£28,898,505	£27,191,594

Exports.

	Sept., 1886	Sept., 1887
British and Irish produce ..	£18,923,975	£19,833,830
Foreign and colonial produce (partly estimated) ..	4,496,979	4,553,464

Below are the details affecting drugs and chemicals:—

Imports.

	Sept., 1885	Sept., 1886	Sept., 1887
Drugs, unenumerated .. value £	72,984	60,655	46,456
Chemical manufactures and products, unenumerated .. value £	98,810	98,214	105,167
Alkali value £	6,910	5,440	5,952
Brimstone value £	5,375	4,088	4,952
Nitre (nitrate of soda) .. value £	90,200	52,307	66,907
" (nitrate of potash) .. value £	21,595	13,413	14,910
Quicksilver value £	110,370	28,300	54,249
Bark, Cinchona value £	60,280	11,655	23,131
Gum Arabic value £	47,414	21,175	24,599
Lac, seed, shell, stick, and dye .. value £	39,883	18,315	20,911
Spices— value £	22,500	63,750	38,270
Cinnamon value £	1,750	5,130	3,252
Ginger value £	7,180	11,044	8,604
Pepper value £	43,217	25,537	35,057
" value £	4,637	4,024	4,174
" value £	14,541	17,813	20,462
" value £	7,599	6,414	3,969
" value £	22,752	16,924	9,290
" value £	191,606	92,339	168,717
" value £	8,218	3,331	7,106
" value £	1,796	1,070	646
" value £	2,971	1,694	868
" value £	5,893,414	4,024,207	4,701,345
" value £	181,958	127,861	160,655

Imports—continued.

	Sept., 1885	Sept., 1886	Sept., 1887
Barks and tanning materials—			
Bark (for tanners' or dyers' use) .. cwt.	50,907	23,300	32,285
" value £	22,048	7,824	13,510
Aniline dyes value £	16,241	21,973	25,340
Alizarine value £	31,570	19,748	23,227
Other coal-tar dyes value £	109	210	660
Cochineal cwt.	722	946	854
" value £	4,329	6,210	5,434
Cutch and gambier tons	2,590	3,015	2,507
" value £	53,483	75,361	62,050
Indigo cwt.	835	1,200	826
" value £	11,825	20,620	14,617
Malder, malder root, garancine, and munjeet cwt.	1,262	2,818	1,426
" value £	1,595	3,120	1,820
Valonia tons	1,989	1,489	1,574
" value £	32,636	21,079	22,234
Chemicals & dyestuffs, unen. ..	168,734	160,639	123,361
Oils—			
Cocoa-nut cwt.	33,464	6,933	9,173
" value £	51,261	9,184	11,199
Olive tons	674	1,308	1,309
" value £	26,786	50,387	43,636
Palm cwt.	73,552	98,533	77,097
" value £	95,618	101,637	75,729
Petroleum gals.	9,672,123	3,965,723	6,153,976
" value £	292,177	131,560	168,070
Seed, of all kinds tons	1,237	1,262	1,233
" value £	34,841	33,215	29,139
Train, blubber, and sperm .. tons	3,265	2,025	1,402
" value £	92,002	50,699	29,363
Turpentine cwt.	64,847	13,568	32,591
" value £	84,917	19,078	41,275
Oils, not enumerated value £	54,101	71,620	79,054
Tallow and stearine cwt.	72,100	75,461	61,781
" value £	101,776	54,090	73,634

Exports.

	Sept., 1885	Sept., 1886	Sept., 1887
British and Irish produce—			
Alkali cwt.	614,330	479,080	541,165
" value £	172,633	140,103	153,434
Bleaching materials cwt.	132,311	126,869	128,562
" value £	44,504	40,707	48,380
Drugs and medicinal preparations, unenumerated	64,928	68,299	68,269
Other chemicals and medicinal preparations	168,017	176,419	181,101
Chemical manure	130,599	129,613	139,635
Oil, seed tons	5,981	4,479	5,021
" value £	138,776	99,362	109,346
Soap cwt.	41,204	35,143	40,458
" value £	46,587	36,276	37,903
Painters' colours and materials, unenumerated	104,055	111,282	121,427
Foreign and Colonial merchandise—			
Bark, Cinchona cwt.	9,007	8,611	10,017
" value £	51,299	39,729	33,332
Chemicals, unenumerated	12,954	9,471	17,521
Cochineal cwt.	657	1,424	508
" value £	4,510	9,291	3,183
Cutch and gambier tons	549	1,237	1,006
" value £	14,418	33,093	26,853
Gum Arabic cwt.	7,924	3,046	2,917
" value £	28,252	14,273	10,987
Indigo cwt.	3,666	2,792	2,336
" value £	60,202	55,304	46,959
Lac (various kinds) cwt.	3,884	7,755	8,551
" value £	12,101	23,101	21,533
Lard cwt.	3,894	1,216	1,802
" value £	7,614	2,343	3,068
Oils, cocoa-nut cwt.	8,953	12,507	5,408
" value £	12,975	18,002	7,150
" olive tons	216	609	213
" value £	10,193	8,928	8,859
" palm cwt.	27,542	65,302	83,831
" value £	36,386	67,620	80,713
" petroleum gals.	27,792	24,760	28,728
" value £	1,462	1,123	1,222
Quicksilver lbs.	723,252	603,957	252,538
" value £	55,524	54,787	24,623
Nitre (nitrate of potash) cwt.	2,255	585	973
" value £	1,844	591	908
Spices, cinnamon lbs.	131,961	114,404	155,600
" value £	5,445	5,121	6,187
" pepper lbs.	3,727,726	2,739,145	3,193,800
" value £	86,055	82,687	102,741
Tallow and stearine cwt.	19,886	29,617	28,867
" value £	26,410	33,408	33,530



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

Sir Dyce Duckworth's Compliments.

SIR,—The remarks which fell from Dr. Greenhow's lips in proposing a vote of thanks to Sir Dyce Duckworth for his address will be endorsed by every chemist. In the paragraph "Past and Present," the last sixteen lines beginning with the words "Without doubt," &c., are so highly complimentary that I think chemists should make an effort to perpetuate them. I would suggest that they should be put into print so that we should be able to order 500 at a nominal price, and circulate them amongst our friends and customers. I think there would be a large demand for them if nicely got up and printed in an attractive form, with "Extracts from Sir Dyce Duckworth's Speech, October, 1887," as a heading.

I am, sir, yours truly,
Stanmore. CHARLES ED. OWLES

Those Homœopaths!

SIR,—If Dr. Duckworth's remarks on homœopathy are a fair expression of his opinion of us, we can estimate the value of his evidence.

I fear that spite has taken the place of the calm judgment we should expect from a gentleman of his calibre when he says that "homœopaths have contributed nothing to pharmacy"; yet in the same breath he gives due notice that he will "carefully avoid any chemist who sells homœopathic medicines," for he "considers it displaying a flag of distress to vend such rubbish."

I do not know how druggists will take this dreadful threat, but as they are mostly under the thumb of autocratic doctors they must take in their "flag of distress" or suffer the consequences.

As a homœopathic chemist I hope they will, for "it is very improper and misleading to the public."

We want no better evidence of the shoe pinching than the wincing of Dr. Duckworth; the public demand for homœopathic medicines is so great that in self-defence our opponents are obliged to stock them. The victory is ours, and I claim it.

The learned doctor further says that no educated pharmacist (nor, I suppose, medical man) should lend himself to the propagation of this erroneous system. No doubt he means openly, for it is an undisputed fact that most medicines effect their cures upon homœopathic laws.

Hahnemann did not make the law of "Similia," nor Newton gravitation; their only sin is pointing them out.

If homœopathy is so bad, why does Dr. Lauder Brunton prig our remedies, then write and lecture on them as his own? Dr. Duckworth may use more of our remedies than the one he mentions, but since Dr. Ringer, Dr. Brunton, and other lecturers on materia medica have introduced them, he may be using many without knowledge of their origin, therefore will, of course, discard "the rubbish."

He may claim that aconite, belladonna, and many others were used long before homœopathy was known; and so they were, or, more properly speaking, were abused.

It is only since Hahnemann very quietly pointed out the governing law of "Similia" that any one has been able to

find the enormous value and wide range of many medicines hitherto only used to allay pain in a rough manner.

If any one cares to prove the truth of these statements he can do so by getting No. 15 of the Homœopathic League tracts, price 2d., of any homœopathic chemist.

Yours faithfully,
The Homœopathic Pharmacy, Oxford. J. H. JESSOP.

SIR,—Dr. Dyce Duckworth, in his address (or sermon) at the Square has gone out of his way to attack homœopathy.

He considers it very improper for druggists to sell homœopathic medicines, which he, in very gentlemanly language, styles "rubbish." He deserves the thanks of the trade generally for the insinuation.

We in the provinces will, I am sure, be very grateful to the worthy doctor if his advice is carried out. We know the public will have our medicines, and will then come direct to us for them, even though they are dubbed "rubbish"; but I question whether the pharmacists will be willing to throw up a considerable source of profit; they will be more likely to tell the doctor to mind his own business.

Dr. Duckworth has evidently not read Dr. Lauder Brunton's "Text-book of Pharmacology," &c., in which such numerous references are made to the value of homœopathic medicines, or he would hardly have used the term "rubbish." His *confrère* may "consider this very improper," as it certainly is "misleading to the public."

Yours very truly,

A COUNTRY HOMŒOPATHIC CHEMIST
AND AN A.P.S. (one of the class that the doctor is "entirely content to trust").

Glycerine Jelly.

SIR,—“Heder's” glycerine jelly is improved upon with regard to its clearness by using no essential oil, but as follows:—

Gelatine (thin French)	..	..	..	3iv.
Dissolve by aid of heat in				
Aq. destill..	..	..	..	3v.
Add				
Glyc. boracis	..	..	..	3x.
And when nearly cold				
Aq. rose trip.	..	..	..	3v.

(I added 5viiss. of the last item, and liked the consistency better.) Thus made, it is as clear as pure water, and quite sufficiently scented; in fact, I think it perfect. The tint of a few drops of saffron water for amber or cochineal for rose makes it more popular still with many.

“ALF.” (176/27.)

Unsinkable Cloth.

SIR,—Some time ago some one asked in your journal if there was a material of cloth, &c., which on being made into a suit would prevent the wearer from sinking in water. And you thought that probably the invention of the late Rev. W. Cowell Brown was the article required, and asked if any one knew anything of it. The reverend gentleman was a guest of mine for a day or two during his stay in Sheffield, and one morning at the breakfast-table he pulled out of his waistcoat pocket what appeared to be a small bag made of cotton or linen, and threw it into the water-hasin, when it immediately became inflated, and rose to the surface of the water, where it remained for a long time. My impression was that in the bag was a powder which on coming into contact with the water formed carbonic acid gas. His invention or idea was to insert several of those bags between the linings of the coat, &c., so that as soon as a person got into the water the bags would at once become inflated, and thus buoy him up.

Workshop.

Yours truly,
GEO. W. JONES.

The Patent-medicine Act and Non-secret Medicines

SIR,—I was pleased to see the letter of “R. H. & Co.” upon this subject in your issue of the 8th. It is surely stretching the Patent-medicine Act beyond its original

intent to tax the dissemination of useful information upon the labels attached to pharmacopœial and other non-private preparations. To give the dose of a medicine is convenient to the public, but to give it apart from its properties and occasions may be frequently misleading, as in the instances of laudanum, ipecacuanha wine, tr. rhubarb, &c. For the last-named my label runs thus—

TINCTURE OF RHUBARB

DOSE.—As a Stomachic in Diarrhœa from undigested food, two or three teaspoonfuls. As a Purgative in Colic with Constipation, from one to one and a half tablespoonful.

Now I am almost afraid that, in their present frame of mind, the Somerset House authorities might consider this label liable.

Undoubtedly the Pharmaceutical Society should come to the front and represent the position fairly to the Inland Revenue, and I strongly believe if they did so, that the plain statement of uses, &c., upon all medicines prepared according to openly-recognised formulæ would be speedily allowed.

Yours truly,
J. T.

The Irish Pharmacy Act.

SIR,—Your Editorial Note on my letter ("Belfast Pharmaceutical Chemist") in October 1 issue is certainly not very encouraging to the "Old Chemist and Druggist," and, for his sake, it should not go without reply. You state clause 31 of the Pharmacy Act is of no effect, as far as it relates to chemists and druggists, if read in conjunction with the 19th section; and as it is perfectly plain that it cannot be read otherwise than subject to that clause, therefore you infer that persons who were in business before the passing of the Act cannot sell poisons legally; but by the same clauses I hold they are legally entitled to do so. The first part of clause 19 enacts that the following provisions of this Act shall not take effect until the approval of the regulations of the Council is published in the *Gazette*. The publication of the approval by the Privy Council has taken place, and therefore covers clause 31, which only refers to chemists or druggists who were such at the passing of the Act, and not chemists and druggists created under this Act, which makes a very great difference; and the remainder of clause 19 only refers to chemists and druggists under this Act, and cannot therefore include chemists or druggists who were in existence prior to an Act which gives powers to create an entirely new body. And further, in every case through the entire Act the words "chemist and druggist under this Act" are used, except in clause 31, where it is "chemists or druggists who were practising as such," showing plainly that they are entirely a different body from those proposed to be created, and therefore do not come under the later part of clause 19.

A BELFAST PHARMACEUTICAL CHEMIST.

Supplying Medical Men.

SIR,—Having recently succeeded in getting a couple of medical men to deal with me, instead of with the usual wholesale druggist, my experiences may not be without profit to my fellow-retailers who contemplate extending their business in this direction. I supplied some oxymel scillæ; but a complaint was made that there was something wrong with it—it was so light in colour although as bright as sherry. My procedure in making this is as follows:—

Heat the honey to 212°, and carefully skim. Take the required weight of this, mix with the acetum scillæ, add one grain of tannin to each pound of honey, heat to boiling point, and filter through a moist paper filter. Evaporate in a water bath to the required consistence. The filtration is tedious, but the product is of a pale sherry colour and of unexceptionable flavour. How do the wholesale houses get the present dusky-brown, clear product?

My next experience was with liq. Donovan. That made by myself from the P.B. formula is straw yellow. I find the wholesale druggists still supply the colourless solution.

My tincture of orange-peel was very much paler, though superior in flavour. The same was the case with my tincture of gentian and calumba.

These discrepancies are annoying, and I nearly lost one of

my new customers, whose knowledge of pharmacy was not sufficient to allow him to appreciate my humble efforts, when they were opposed to the practice of the wholesale trade.

Yours faithfully,
SUBSCRIBER. (173/12.)

[It is a matter of common experience that extracts, infusions, tinctures, and other similar preparations as made on the small scale are lighter in colour than those which may be purchased. As our correspondent's customers gain confidence in him they will have the more faith in his preparations, and he should lose no opportunity of showing that he is competent, both commercially and technically. All the characteristics of his preparations can be explained, the explanation being sufficient to show that they are proper preparations; but we should judge of the Donovan's solution that the arsenium iodide contains free iodine. This solution should be colourless.]

Testing Otto of Rose.

SIR,—I would like to place before your readers a simple test for determining the parity and value of otto of rose, which is universally adopted by distillers and dealers in Bulgaria, but only known to very few buyers in England. The test consists in pouring $\frac{1}{4}$ oz. to $\frac{1}{2}$ oz. of otto into a thin sample bottle, and when in a liquid condition to place the bottle into a flat-bottomed bowl of water at a temperature of 65° Fahr. After two and a half to three minutes the bottle may be taken out of the water, when the otto should be in a congealed mass of needle-shaped crystals. Otto answering to this test may be taken as a standard, and for every degree of temperature lower in the scale under similar conditions the value decreases 4d. to 6d. per oz. Turkish. I am aware that by adulteration otto can be made to congeal in any temperature, but when put to this test any admixture is easily detected.

The sense of smell will not detect adulteration of less than 10 per cent., but by the simple test above described sophistication can be easily determined which the nose cannot detect, and all who are interested in otto of rose would do well to make the experiment.

I am, sir, yours faithfully,
19 Ivy Lane, E.C., Oct. 7. GEO. P. BAKER. 172/57.

Proprietary Articles.

SIR,—Your recent article on this subject contained many useful hints, but I differ from you on the putting-up of cod-liver oil. The bottles should simply have a nice attractive label, but should not be wrapped or enclosed, as customers invariably expect to find a clear oil, free from deposit, and like to view it when purchasing. The same remark applies to castor oil, chemical food, &c.

Yours faithfully,
ÆSCULAPIUS. (64/175.)

Ung. Gallæ Co.

SIR,—I have remarked that the addition of 1 drachm of camphor to 7 drachms of ung. gallæ co. makes a most effective application for hæmorrhoids. This is a "tip" for an intending advertiser of a proprietary article.

In spite of Sir Dyce Duckworth's declamation, we must make and push preparations for the public. But I believe that chemists give a good *quid pro quo*. I know a North-Country quack who advertises a cure for piles, and gives a $\frac{1}{2}$ -oz. chip box of what appears to be nothing more than ung. gallæ co. for 2s. 6d. This is the kind of thing that discredits the patent-medicine business, and more or less discredits us as "distributors."

Yours truly,
HEDER. (175/56.)

Butter Powder.

SIR,—In Shropshire farmers' wives use saltpetre to make the butter come. I have none of the fashionable powders in stock, but should be glad to know if your answer to "Preston" and G. Hulme last week was a reply to a query as to composition.

Yours truly,
HEDER. (175/56.)

[A sample examined had the composition which we stated.]

Spices and Condiments.

SIR,—The plan I adopt in encouraging this trade is to insist upon the importance of quality, fine flavour being the *sine qua non* of these commodities. It is impossible, as well as undesirable, to compete in price with the grocers, &c., but we can easily beat them in quality. When I get a chance I let my customers know about adulterations, show them my nutmegs, prick one or two with a pin, and let them see the oil come out, then ask them to try their grocers' samples in the same way; draw their attention to the difference between cassia and cinnamon, especially in the powdered state, and so on. In other words, let them know that you understand this branch of business, and their confidence will follow. It is, of course, uphill work, and requires patience and tact to ensure success. By making careful note of the adulterations frequently reported in THE CHEMIST AND DRUGGIST, and telling your customers the latest dodge, you will raise yourself in their estimation, and to my mind that is the one thing we must depend upon in these times. Get your customers to believe in you and to trust you, and a measure of success is sure to follow. Yours truly,

H. C. (175/34.)

[This correspondent sends us also a clever announcement drawing the attention of "refined and appreciative house-keepers" to the subject of spices and condiments, and pointing out that "good seasoning, or bad, makes, indeed, all the difference between a dinner that is appetising and alluring and one that is vapid, tasteless, unattractive, and insipid. The most costly viands may be completely spoilt by carelessness in flavouring, while the plainest food obtains a relish when judiciously admixed with suitable condiments." The opening of this circular is so effective that we take the liberty of quoting it as a sample of how, in our opinion, such circulars should be presented:—"It's the seasonin' as does it!" says the immortal Sam Weller, quoting the dictum of his old friend Brooks, the pie-man; and happy would it be for many a family if this philosophic aphorism were more widely realised and carried out. The seedy individual, too, who once went into a London cookshop and said, 'I want two penn'orth of beef, and please to cut it with a hammy knife,' was another culinary philosopher, whose worldly surroundings were, unhappily, not in accordance with his artistic soul."]

DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

An Effervescing Mixture.

SIR,—Accepting your correspondent's invitation, I venture my opinion with regard to the above.

From the prescription I should presume that the prescriber would be found at the bedside; and would seek him there or elsewhere. If I did not find him I would make inquiries from the nurse what instructions had been left with regard to the administration of the medicine. Probably she could throw some light upon the subject. If not, I would undertake the responsibility myself and dispense the mixture as follows:—

Potass. bicarb.	3ij. 3ij.
Ext. ergotæ liq.	3ij. ℥xl.
Potass. brom.	3j. 3j.
Aquæ ad.	3vij.
M. Ft. mist. alkalina. Capiat 3j. quaquâ horâ, in effervescen. c.	
3j. mist. acida sequent.	
Acid. citric.	3j.
Tinct. cardam. co.	3j.
Aquæ	3vij.
M. Ft. mist. acida.	

Here I have presumed the "oz." of tincture in the original an error for a "drachm." But at best it is a nasty mixture; the effervescence would only bring out more markedly the nauseous taste of the ergot, whilst the citric acid would liberate a little hydrobromic acid by reaction with the bromide of potash, and the cardamoms would diffuse (instead of cover) the unpleasant eructations. Yours truly,

West Bromwich.

DUDLEY GILL.

[The acid may be sent out as powders, 15 grains in each, enveloped in waxed paper. To the prescribed ingredients for an 8-oz. mixture add 160 grains of bicarbonate of potash, and direct a powder to be added to each dose of the mixture. 5j. of tr. cardam. co. is meant.—Ed. C. & D.]

SIR,—Has your correspondent given the correct quantities? The ergot and bromide are quite disproportionate to the quantity of tincture ordered. I should have put them into the alkaline solution, and directed a dose to be taken every hour. In this locality the acid is usually sent out in a 4-oz. solution with a tablespoonful dose.

Yours truly,
HEDER. (175/56.)

Liniment Query.

Dissolve the chloroform in the turpentine; add very gradually to lin. pot. iodidi c. sapone (previously heated gently till of a creamy consistency) placed in a warm Wedgwood mortar. Triturate until thoroughly incorporated. Process must be quickly performed to prevent evaporation of the chloroform. SPES. (171/70.)

SIR,—I have found the following to be the most satisfactory method of making up the formula given by "Roines." Operating on a quarter of the quantities, I mixed 2 grains pulv. tragac. with the turpentine and chloroform. Then the liniment was rubbed smooth with 4 grains of potas. carb. and 1 drachm of water, and put into a stoppered bottle containing the other ingredients, and the result was a smooth and inseparable cream, which did not become discoloured. I tried other methods, making emulsions with soap, adeps, &c., but in each case there was a separation on standing, with a reduction of the iodide. Yours truly,

HEDER. (175/56.)

Collodion and Ext. Belladonnæ.

SIR,—Will you kindly tell us the best way to dispense the following prescription? We find a difficulty in turning it out satisfactorily:—

Ext. belladonnæ	gr. 10
Collodion	3ss.
Misce.	

NORTHERN. (172/77.)

[Triturate the extract with a drachm of rectified spirit, strain, and add to 3 drachms of collodion made with the ether only.]

Plumbi Diacet.

SIR,—What preparation of lead should be dispensed in the following prescription:—

Plumbi diacet.	3ij.
Acid. carbolic.	3j.
Aq. laurocerasi	3vij.
M. Ft. lotio.	

P. B.

[Judging from the expression "3ij.," we should say ordinary acetate of lead.]

Lotion or Paste?

SIR,—Here is a "sweet" thing in applications. I would like to know how some of your "knowing ones" would dispense it, and what it would be like when finished:—

Ol. olivæ	3xij.
Aq. calcis ad	3iv.
Zinci oxyd.	3j.
Pulv. amyli	3j.

Ft. lotio. To be applied freely for eczema.

The oil and lime-water to be well mixed first, and the zinc and starch to be added.

E. B. K. (174/60.)

A Query.

SIR,—I am not sure that "Cymro's" query must be answered in the negative, but a permanent solution may be made by the addition of 8 grains of citric acid.

Yours truly,
HEDER. (175/56.)

Chloride of Zinc Lotion.

SIR,—I shall be pleased to have your opinion on the following and such like prescriptions:—

Zinc. chlor. 3ss.
Aq. 3j.

Ft. lotio.

I sent out just as written—not clear—as the zinc. chl. will not dissolve even in aq. dest. It was returned next day by the patient, with the remark that the doctor was not satisfied, as it should be clear.

Yours truly,
MANAGER. (175/24.)

[Chloride of zinc always contains a little insoluble oxy-chloride. A few drops of dilute hydrochloric acid dissolve it, but the best plan is to keep a clear solution of the salt (1 in 2), or filter the freshly-prepared solution through glass-wool or pyroxylin.]

Camphor and Chloroform.

SIR,—I am in the habit of making a stock mixture for a doctor's dispensary, consisting of chloroform m. 192, and mist. camph. ad 80 oz.; after this has stood a few hours I find a deposit of large, heavy, oily, colourless drops at the bottom. Can you please give me the nature of this reaction and the name of the body produced; if so you will greatly oblige,

Yours truly,
CAMPHORA. (175/28.)

[We have observed this phenomenon. It is not a case of chemical decomposition, but of the difference in the affinity of camphor for the solvent chloroform and the solvent water. The oily drops are a solution of camphor in chloroform, somewhat similar in character to camphor and chloral, and they do not dissolve because water has not the power to overcome the affinity between the chloroform and camphor.]

LEGAL QUERIES.

29/172. *P. B.*—As Gregory's powder appears in the Pharmacopoeia as a synonym for pulv. rhei co., we have no doubt it is illegal to prepare and sell as such a preparation made by any other formula. We should expect a conviction could be obtained, if the offence were proved, under the Sale of Food and Drugs Act, and no doubt a penalty of 5*l.* could be recovered if sued for by the Pharmaceutical Society under the 15th section of the Pharmacy Act. [2.] We should not consider it necessary, in order to avoid penalty under the Sale of Food and Drugs Act, to describe as "methylated" a liniment so prepared, presuming the liniment to be one of those which are allowed by the Board of Inland Revenue to be prepared with methylated spirit. The result of a prosecution in such a case would, however, be quite doubtful.

55/175. *Inquirer* asks whether it is illegal to offer prizes for competition as follows:—Customers purchasing a speciality to have a coupon given them, and to state thereon a guess to nearest number of pills contained in a vessel placed in shop window?

[We do not see anything illegal in a competition of that kind. The offer that was considered illegal was to give a piece of jewellery, or a piece of money, in one out of every hundred or thousand packets of sweets or other articles. That was a lottery pure and simple; the guessing is nothing of the kind.]

70/172. A person who was in business before 1868 can still get registered as a chemist and druggist if he can produce the required evidence; that is, he will have to get a declaration signed by a medical man or a magistrate who

can declare the fact from his personal knowledge. A fee of 5*l.* 5*s.* will have to be paid. Application must be made to the Registrar, 17 Bloomsbury Square.

74/172. *Alb.*—You will find the particulars you require concerning the veterinary profession in our Educational Number (September 17).

35/176. *J. D. W.*—We cannot say how the Board of Inland Revenue would regard your placard. Why not ask them?

28/176. *Retail Chemist.*—In 1880 we published a letter from the Board of Inland Revenue informing us that, though the sale of any quantity of spirit by unlicensed persons was not authorised by law, they (the Board) would not prohibit the sale by chemists to medical and scientific persons of quantities not exceeding 8 oz. for purposes of medical and scientific research.

3/23. To ascertain whether a word has been previously registered, you must either pay 1*s.* for a search, or you can apply for registration yourself, paying 5*s.*, which you will lose if the word is already on the register.

MISCELLANEOUS INQUIRIES.

174/64. *J. Gibson.*—Your German recipe is for eye-water, and is valerian water, fennel water, and rosemary water, of each 1 gramme.

The valerian water is made by shaking 2 drops of the essential oil with 100 grammes of tepid water; rosemary water may be made in the same way. Fennel water by distilling 30 parts of water from a mixture of 1 part of the bruised fruit and 50 or 60 of water.

174/46. *Perplexed.*—Kerosine (for burning purposes) is not capable of deodorisation. Its odour is to some extent "refined" by redistillation.

173/38. *D. J. L.*—If you add to each pint of your iron and quinine mixture $\frac{1}{2}$ oz. of spirit of chloroform you will find that it will keep better.

173/15. *Oviform.*—We have not examined the machinery with which ovoid pills are made, but presume that the secret is in the cutters. If these provide a greater space between the cutting edges than the depth, an ovoid pill will be the result.

175/4. *Signor vel Dovo.*—The washing fluid, composed of ammonia, soap, and turpentine, for which we have repeatedly given a formula, brightens colours, but we know of nothing which will restore all colours.

171/61 and 174/3. *Apprentices* (Swaffham and Aberystwith).—Sublimed sulphur is called flowers of sulphur because it forms flower-like arrangements in the sublimate receiver. "Flour of sulphur" is incorrect. A chilblain remedy was given last week, page 458. We know of nothing but good feeding and exercise to prevent the skin becoming "dark blue" on exposure to cold.

172/16. *Wanganui.*—We gave a formula for herb beer extract last week, page 470. Several formulæ will be found in last volume. **Cement.**—An excellent article, similar to several popular kinds, is made by soaking 1 oz. of isinglass in 2 oz. of water; add 4 oz. of glacial acetic acid, a drachm or two of powdered mastic, and dissolve by the aid of heat.

171/51. *Oxymuriatis.*—**Hop Substitute.**—The following is good for home-brewed beer:—Gentian (sliced), $\frac{1}{2}$ oz.; orange peel, quillaia (in coarse powder), Irish moss (chopped small), and buchu, of each $\frac{1}{4}$ oz. Mix. Sufficient for 6 gallons of beer. Quillaia is best for giving beer a "head."

171/46. *Assistant*.—**White Cement** (for marble).—Digest 2 oz. powdered white shellac in 4 oz. of methylated spirit at a gentle heat until dissolved, and before applying to the marble mix with it a little precipitated chalk or powdered marble. We presume that L. C. S. A. means Lc.S.A.—Licentiate of the Society of Apothecaries. "Assistant" wishes details from personal experience of the Apothecaries' Hall examination for assistants. Can anyone oblige him?

172/48. *H. K.*—The following is a Glasgow formula for **Chillie Paste**:—Macerate 8 oz. of powdered capsicum in 32 oz. of olive oil for three days; strain, press, filter, warm, and add to it 6 oz. of melted spermaceti. "Smedley's" paste is said to be the property of Hirst, Brookes & Hirst.

172/68. *Toothache*.—We gave full details of the use of cocaine for teeth extraction in our issue of May 1, 1886.

Quintum.—In four different places I have been, in different parts of the country, ung. plumbi acet. has been used.
EBOR.

173/26. *J. W. S.*—**Vin de Baudon** (a wine largely used in France as a substitute for cod-liver oil).—From the sample of this which you have sent we judge that its active constituent is phosphate of lime. The following formula may afford a similar article:—

Phosphate of lime	..	..	..	160	grs.
Hydrochloric acid	..	..	..	3	iss.
Glycerine	..	..	..	3	ij.
Water	..	..	..	3	i.
Syrup	..	..	..	3	ij.
Sherry, to make	..	..	..	0	j.

Mix the phosphate with the water, add the acid, dissolve and add the other ingredients. Shake well, allow to stand for a day or two, and filter.

Prices of B.P.C. Preparations.—*Æsculapius* (64/75) suggests that it would be of special interest to country subscribers to state the prices at which the preparations of the B.P.C. (for which formulæ have recently appeared) are being dispensed or retailed.

34/176. *J. H. H.*—All wholesale druggists and drysalers supply the goods you name.

175/9. *Lewis Ough*.—**Wood Naphtha** is obtained as a by-product in the destructive distillation of wood for the manufacture of acetic acid. It comes over with the acetous distillate, and is afterwards freed from it by neutralising and redistilling. The principal constituent of wood naphtha is methyl alcohol (CH_3O), acetone is the next, and a host of bodies are also present in small quantity. Mineral naphtha is also a mixture of bodies, but consists chiefly of paraffins and olefines of low boiling-point, pentane, C_5H_{12} , and pentene, C_5H_8 , being the principal of them. You adopted the usual way for preparing the skull, but your alkaline solution was too strong.

175/8. *Chocolate*.—You will find a formula for tooth-soap in our last volume, page 182. We do not have a formula for "melanyl."

175/20. *A Subscriber* (Alnwick).—As long as the zinc remains on the galvanised-iron tank you may keep turpentine in it without fear of coloration, but the zinc comes off in the course of time. Turpentine would dissolve a shellac varnish.

175/60. *Geo. Brown*.—We gave particulars regarding dulcified spirits of salt some weeks ago. Weak lime-water is rarely used as an eye-lotion.

173/22. *Patlander*.—**Husband's Magnesia** is a brand of calcined magnesia much used in the United States; Murray's is ranked higher than it.

Books.

173/21. *Prox.*—We cannot undertake the analysis of urine for correspondents. If you read the article on "The Analysis of Urine," in our issue of July 30, you will get all the information you require. See also Legg's "Guide to the Analysis of Urine." (Lewis, 2s. 6d.)

171/65. *Yorkshireman*.—**Books on Electroplating**.—Watt's "Electro-deposition" (Crosby Lockwood, 12s. 6d.), Urquhart's "Electroplating" (same, 5s.), Napier's "Electro-metallurgy" (Griffin, 7s. 6d.). Please consult our advertisement pages for the other information, and try a few of the firms.

19/9. *C. Saunders*.—**Assaying of Metals**.—Mitchell's Manual (5th ed. Longmans, 31s. 6d.) is a most comprehensive English work. Lee Brown's Manual (Sargent & Co., Chicago, \$2.50) is a small work of an equally practical character. It might be got through Lippincott.

25/175. *Wholesale*.—You will get what you want from some of the glass-bottle makers who advertise in this journal.

174/69. *Water*.—Heisch's sugar test for the presence of sewage contamination in potable waters is to add 10 grains of pure and crystallised sugar to 6 oz. of the suspected sample, and to keep it in a warm place (80°F .), when, if the water is not pure, turbidity occurs, and fungoid growths are developed. In a paper read by Mr. F. E. Lott before the Birmingham section of the Society of Chemical Industry there is recorded that the odour of butyric fermentation which attends this fungoid development accompanies the presence of phosphates. He summarises his results as follows:—

1. Any water undergoing butyric fermentation when simply heated with cane sugar and kept at a temperature of about 80°F ., may be at once condemned as unfit for domestic use.

2. The single fact of a water not undergoing butyric fermentation is no proof of its purity.

3. A water which remains clear under this treatment would be certainly less likely to be contaminated by sewage than one which became milky, and he doubts the possibility of unoxidised sewage matter being in a water which remained quite clear.

4. The butyric fermentation is not perceptibly influenced by the presence of abnormal amounts of chlorine, free ammonia, albumin, sulphates and nitrates in a water, but is a very accurate indicator of the presence of phosphoric acid.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

168/54. Recipe for "Cheshire Bottle."

64/175. Maker of Peach Blossom Perfume, or London agent.

A RUSSIAN AUTHORITY has published results of experiments with peat as a deodoriser. It has a wonderful power of absorbing moisture, 1 lb. of it (containing 25 per cent. of water) having absorbed seven and a half times its weight. A hundred pounds of the powdered peat will absorb 1,438 litres of ammonia.

THE latest device for preventing mistakes in dispensing has been patented in the United States. It consists of a box, the size and shape of a paper-collar box, with a flexible top upon which the bottle or poison-container is placed. When removed, the expansion causes a bell fitted in the interior to strike, thus warning the dispenser.

MAGNESIUM LIGHT FOR PHOTOGRAPHIC PURPOSES is now made by mixing 12 parts of chlorate of potash, 6 parts of magnesium powder, and 1 part of prussiate of potash. The powder burns with a flash, lasting only from $\frac{1}{30}$ to $\frac{1}{50}$ of a second, and yields a more intense light than when wire or ribbon is used.